



A Weekly Journal of the Chemical and Drug Trades
and of
British Pharmacists throughout the Empire,
ESTABLISHED 1859.

The CHEMIST AND DRUGGIST is the leading Journal addressing the chemical and drug trades of the British Empire. It is adopted as an official Journal by nineteen Chemists' Societies in Australia, Ireland, New Zealand, South Africa and the West Indies, and its paid-in-advance circulation in Great Britain and all Countries having business relations with the British Empire is intrinsically and numerically unique.

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Publisher's Notice.

Your Export Trade.

THE man who can help your export business more than anyone else is the Merchant Shipper. He is the *via media* between the manufacturer and wholesale dealer at Home and the buyer Abroad. Therefore it is good business to cultivate the Man with the Indent. An excellent opportunity for doing this is afforded to all who have chemists' goods to sell by the publication on March 11 next of the

Export Merchant Shippers' Issue

OF THE CHEMIST AND DRUGGIST. If you have not already booked advertising space in that Issue, do so at once. The Publisher has issued an attractive booklet on the subject, and a copy will be forwarded to anyone interested by application to him at 42 Cannon Street, London, E.C.

Summary of this Issue.

The more notable items only are dealt with.

Articles and Communications.

Artist and rhymers join in "The Progress of Perk" to show how a pharmacist was evolved (p. 53).

We complete our notes on the oils and fats monographs of the new German Pharmacopoeia (p. 54).

Mr. Donald McEwan deals in an interesting manner with the production, commerce, and properties of Stockholm tar (p. 58).

In the third part of the Coroners' Committee report the administration of anaesthetics is dealt with, and several suggestions made (p. 52).

The conditions of the olive crops throughout the world are summarised in a special article, in which it is shown that the output of oil is much reduced (p. 55).

A Bill to amend the Veterinary Surgeons Act will bring all veterinary practitioners under the disciplinary powers of the Royal College, and make company practice an offence. It is explained in an article on p. 57.

We commence a series of Editorials on the proposed Minor Curriculum. In the first we show that the Pharmaceutical Society's original object was a uniform system of education for pharmaceutical chemists, that this was shifted to chemists and druggists only, and that the present proposal is adverse to the interests of chemists (p. 50). Several correspondents discuss the proposal (p. 60), and local Associations (pp. 41, 45, and 57).

The Week's News.

The proposed early closing order for Dundee chemists appears to be *ultra vires* (p. 36).

Mr. Winston Churchill has promised to look into the matter of labelling patent medicines with their composition (p. 41).

A list of tradesmen who have received royal warrants of appointment has been gazetted, and extracts from it will be found on p. 48.

The Brewster Sessions are now drawing to a close. Chemists have had varied experience in their applications for wine licences. See the reports on p. 35.

Amongst the deaths reported are Mr. John Clift of Dorking, Mr. W. Jones of Maw's, and Mr. J. W. Walton of High Broughton, respecting whom particulars are given on p. 39.

Dr. C. Symes, of Liverpool, has got the local Chemists' Association to write to the Chancellor of the Exchequer expressing satisfaction in regard to the rumour that the spirit duty is to be reduced (p. 42).

A curious case is reported from the High Court in connection with the business of Henry Squire, Cash Chemists, Ltd., a firm who audited the company's accounts being sued for certifying inaccuracies. The actions failed (p. 37).

Some Members of Parliament are being worried by army dispensers and apothecaries' assistants who want to be registered under the Pharmacy Acts without examination. See our parliamentary notes (p. 41) and the comment on p. 53.

Trade and Market Matters.

The cod-fishing at Lofoten opened three weeks later than usual, and the results so far are very meagre. So much so that the market has suddenly jumped considerably, and the outlook is uncertain (p. 46).

There is a healthy tone about the markets, but the excitement in menthol and peppermint oil has subsided; there is no apparent weakening yet. Bromides, cassia oil, cod-liver oil, opium, and turpentine are all higher. Quicksilver (seconds), copper sulphate, wood oil, and Madras turmeric are firmer. Carbolic acid, cubebs, and ergot (c.i.f.) are easier (p. 45).

CAPILLIPHOR, LTD.—The report of liquidator (Mr. A. H. Pownall) will be submitted at meeting to be held at 42 Spring Gardens, Manchester, on March 14, at 10.30 A.M.

LONDON COMMERCIAL SALE ROOMS, LTD.—The directors recommend a dividend of 3 per cent. (6s. per share), free of income-tax, for the half-year, making 6 per cent. for the year, putting 300*l.* to reserve and carrying 621*l.* forward.

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C

ENGLISH AND WELSH NEWS.

When sending newspapers to the Editor please mark the items of news to which you desire to call his attention.

Brevities.

On February 12 the residence of Mr. J. C. Hall, chemist and druggist, Lytham Street, Blackpool, was broken into, and a silver cup taken.

Miss Margaret E. Buchanan, Ph.C., spoke on the subject of "Pharmacy" at the Women's Institute, Victoria Street, London, on Wednesday, February 15.

Mr. J. Davy Turney, Ph.C., delivered a lantern-lecture on "The Chemistry of Plant-life" at the Plymouth Athenæum on February 9. The instructive address was rendered even more interesting by a number of experiments conducted by Mr. Turney.

At the ordinary meeting of the Council of the Royal College of Surgeons on February 9 regulations for a new diploma in tropical medicine were approved. The examination for the diploma is to be conducted under the superintendence of the Conjoint Board.

New draft regulations have been issued by the Home Secretary dealing with dangerous processes in the smelting of materials containing lead and in the manufacture of red and orange lead and flaked litharge. When made the regulations will supersede the existing special rules, and objections on behalf of anyone affected must be sent in within forty days.

At Hertford Assizes on February 13, Sidley levers Lightfoot (46), L.R.C.P.&S.E., L.F.P.S.G., 11 Station Road, Watford, was found guilty and sentenced to five years' penal servitude for performing an illegal operation on a young woman. The defence was that while examining the woman she had a violent eclamptic fit, and that in these circumstances his treatment was justifiable and was the best for the girl herself, so that she might get rid of the encumbrance from which she was suffering. Dr. Blacker, of Wimpole Street, and Dr. Skene Keith, of Upper Berkeley Street, were called in support of his case. Mr. Justice Bucknill certified for an appeal, saying there was abundant evidence to justify it.

Poison-licences.

The following have advertised their intention of applying for poison licences to their respective local authorities:

Richard Williams & Co., general dealers, Cambrian House, Garn Dolbenmaen (Carnarvon C.C.).

G. Hewitt, manager to Bees, Ltd., 166 Bedford Road, Rock Ferry, Birkenhead.

Mr. David McElnay, nurseryman, etc., 30 Village Road, Oxtou, Birkenhead.

Geo. Newman, John Powell, and W. G. Davies, assistants to Brown & Sons, seedsmen, 31 Bridge Street, Bristol.

Mr. Alfred James Bartlett, rustic builder and dealer in garden requisites, 97 Beckenham Lane, Bromley, Kent.

W. W. Cowley and C. H. Holland, assistants to H. Matthews & Co., Ltd., oil and colour merchants, Lewin's Mead and 4 Old King Street, Bristol.

F. E. Allingham, 40, Hampton Park Redlands; W. Townsend, 8 Coronation Avenue; and J. H. Jordan, Waltham House Gardens, Stoke Bishop, assistants to J. Garaway & Co., nurserymen, etc., Chantry Road, Clifton, Bristol.

The Kesteven (Lines) County Council have renewed the licences held by Messrs. Charles Sharpe & Co., Ltd., Sleaford, Wm. & James Brown, Stamford, and Slater, Thompson & Sons, Metheringham.

The Southport Town Council had before it on February 14 applications for poison-licences by Mr. F. J. Elliott, seedsmen, 111A Eastbank Street, and Mr. Thos. Moir (Bees, Ltd., seedsmen), 517 Lord Street. A petition had been put in by local chemists pointing out that the reasonable requirements of the public with regard to the purchase of poisonous substances were already amply met. The Watch and Public Halls Committee agreed with the petitioners, and the Council decided to refuse the applications.

Local Trade Matters.

The following chemists have been elected officials of their local Tradesmen's Associations:

Mr. J. Fillingham, Ph.C., Grantham, re-elected President. Mr. J. Laurie, 2 Lytham Road, Blackpool, appointed Vice-President.

Mr. W. Pollard, 35 Westgate, Wakefield, elected to the committee.

Mr. J. T. Fleet, 24 Sheep Street, Rugby, elected chemists' representative on the committee.

Messrs. J. Righton, 515 Lord Street, and J. Joye, 30 London Street, Southport, elected members of the Executive Committee.

Mr. W. Arkle, Chairman of the Lancaster Chemists' Association, has been appointed a member of a committee formed to increase the town's trade.

Birmingham Notes.

Friends of Mr. W. B. Featherstone will learn with regret that he makes no great progress towards recovery, and for some weeks has been wholly confined to his bed.

Some excellent window displays have resulted owing to pharmacists following up the decision of the local school authorities to insure that children possess a good knowledge of the value of teeth preservation. As an adjunct other toilet-articles are seen, including manicure appliances neatly arranged.

Mr. John Wakefield, Ph.C., of Messrs. Bellamy & Wakefield, met with a nasty accident while cycling down Broad Street, owing to a float running into his machine while he was avoiding a tramcar. Mr. Wakefield escaped with a severe shaking and some bruises, but his cycle was ruined. Happily he is about again, but he has not yet recovered from the shock.

Lancashire Notes.

Most chemists have been experiencing better times as the result of a revival in trade throughout Lancashire.

The whist drive which was postponed from February 8 to February 15 in connection with the Manchester Pharmaceutical Association has again been postponed indefinitely on account of the lamentable death of Mr. J. Woodruff Walton, chemist, of Higher Broughton.

A question of the correct address on a poison-label was before the Liverpool Police Court on February 7, when Messrs. W. T. Warhurst, Ltd., were fined 3*l.* 3*s.*, with 5*s.* costs, for selling laudanum improperly labelled as regards the address of the seller. The defence was that an old label was unintentionally used bearing the words "W. T. Warhurst, dispensing chemist, Walton, Seaforth, Bootle, Litherland, Liverpool."

At the inquest held at St. Helens on the eighteen-months old child of Peter Tabern, the mother said a bottle of medicine was obtained for the child from Mr. J. W. Jackson, chemist, 71 Duke Street. Later she called in Dr. Bassett, who also supplied medicine. Dr. Bassett refused a death certificate, as he did not know of any reason why the child should die within twelve hours after he saw her. The Coroner, in addressing the jury, emphasised the point that through Dr. Bassett an inquest was held which might have been avoided and the parents spared the pain of an inquiry. Death from natural causes was the jury's verdict.

Contracts.

Runcorn Urban Council.—Mr. H. Gibson, Ph.C., Runcorn, for carbolic acid.

West Ham Town Council.—For annual supplies: Burt, Boulton & Haywood, Ltd., for chloride of lime; Burgoyne, Burbidges & Co., for druggists' sundries.

Plymouth Town Council.—Hospital and General Contracts Co., Ltd., for annual supplies of drugs; Western Pigment Co., Ltd., for disinfectants; Quibell Bros., Ltd., for disinfecting fluid (organic coefficient 15.5) at 2*s.* 10*d.* per gal.; Burt, Boulton & Haywood for sanitary fluid (20 per cent.) at 1*s.* 0*½d.* per gal. and (3 per cent.) at 10*½d.* per gal.

Southampton Town Council.—Messrs. W. Bates & Co., Ltd., for the annual supply of disinfectants to the hospitals as follows: Bond's fluid (Grindley's) at 1*s.* 1*d.*

per gal.; carbolic acid (97 per cent. commercial) at 1s. 3d. per gal.; carbolic acid powder (15 per cent. commercial) at 2l. 10s. per ton; chloros at 1s. per gal.; chloride of lime at 8s. per cwt.; formalin at 1s. per lb.; glycerin (commercial) at 1s. per lb.; izal at 5s. and 2s. 6d. per gal.; izal powder (No. 1) at 5l. per ton; Jeyes' fluid at 4s. 6d. per gal.; liquor carbo detergens (Wright's) at 2s. 6d. per lb.; phenate of soda (40 per cent. solution) at 1s. per gal.; sulphur dioxide (20-oz. cylinders) at 6l. per gross; Pain's smoke-cases (for drain-testing) at 2l. 14s. per gross.

Sale of Food and Drugs Acts.

The Wolverhampton analyst returned the following samples, examined during the past quarter, as genuine: Mustard 2, mustard condiment 1, cream of tartar 1, pepper 1, and malt vinegar 1.

Of the 124 samples submitted to the Accrington analyst for examination only four were certified as not genuine. The drug samples taken were: Pepper 4, castor oil 1, olive oil 1, cream of tartar 1, tincture of rhubarb 1, and tartaric acid 1.

In Bristol during the past three months the following samples were analysed: Castor oil 6, sulphur ointment 5, zinc ointment 4, precipitated chalk 4, compound liquorice powder 3, cascara tablets 3, olive oil 3, ammoniated tincture of quinine 3, mineral waters 2, glycerin 2, carbonate of magnesia 2, ginger wine 2, camphorated oil 2, lemonade powder 1, strong mercurial ointment 1, eucalyptus oil 1, sulphur and sarsaparilla tablets 1, senna leaves 1, pepper 9, and vinegar 9. All were genuine with the exception of one sample consisting of wood vinegar.

The City of London analyst (Dr. Frank L. Teed) examined 242 samples last quarter, including the following: Mustard 11, prescriptions 10, white pepper 6, almond oil 5, boric ointment 4, olive oil 1, and zinc ointment 1. All the drug samples were genuine, and in his remarks Dr. Teed says: "I am happy to report that all the prescriptions taken, 10 in number, were properly made up. This is a very different state of things from the time, not very far distant, when 87½ per cent. of them were wrongly dispensed, and it would appear as if, for the time, the vendors of drugs were alive to their responsibilities and to the existence of the Acts." Dr. Teed considers such examples demonstrate the importance of continuous and untiring administration of the Acts.

Wine-licences.

The following applications for off wine-licences have been refused:

Mr. Walter Graham Smedley, Ph.C., of the Green Pharmacy, Warwick Road, Acock's Green.

Mr. T. S. Jones, chemist and druggist, 41 Church Road, Birkenhead, for renewal of wine and spirit licence.

Mr. J. W. Aspinall chemist, 34 Preston New Road, Blackburn. Applicant put in a petition signed by six medical men, stating that medicated wines were frequently prescribed by them for their patients.

Mr. F. E. Harrison, Ferryhill Station, who applied for a medicated-wine licence. One of the grounds of opposition was that applicant was not a registered chemist.

Mr. W. McIntyre, of Messrs. Waller & Riley, chemists, 65 Newport Street, Bolton, for a medicated-wine licence. Another firm opposed the application on the ground that there was already sufficient provision for the sale of medicated wines.

Mr. Gilbert H. Hawkins, chemist, of Messrs. Culverwell & Hawkins, Minehead. This application at the Dunster Licensing Sessions failed owing to the customary notice being affixed to the door of the Wesleyan Church instead of the parish church.

Mr. John Ed. Schofield (Taylor's Drug Co., Ltd.), 22-24 Thwaites' Arcade, Blackburn. Mr. Carter, solicitor, in applying, said that the rent of the premises was 160l. a year. During the last five weeks there had been no fewer than 131 applicants for proprietary wine and medicines. His clients had held a wine-licence for many years up to 1902, when it lapsed owing to inadvertence. A list of preparations for which the licence was desired was handed in. The clerk (after examining the list): "It must be a profitable thing manufacturing these wines."

Medicated-wine licences have been granted to the following applicants:

The Timothy White Co., Ltd., Dorking.

Mr. John Taylor, drug-dealer, 35 Stand Lane, Radcliffe, Lancs.

Mr. W. Montagu Martin, chemist and druggist, 1 St. Aubyn Street, Devonport.

Mr. W. T. Thomas, chemist and druggist, Gorseinon, Glamorgan.

Messrs. J. Savage & Co., Ltd., Bradford, for branch at 34 Skircoar Green Road, Halifax.

Mr. Frederick W. Appleyard, chemist and druggist, 148 Toller Lane, Bradford. Mr. Appleyard previously held a licence for premises at 28 Little Lane, Duckworth, Lancs.

Mr. W. M. Woodhouse, chemist and druggist, 45 Bull Ring, Ludlow. Mr. Woodhouse was required to give a written guarantee to the effect that he would sell medicated wines only.

Messrs. G. E. Bridge & Co., The Firs Vale Pharmacy, Bournemouth. This licence was granted on condition that wines were only supplied on the written order of medical men; and Mr. Bone, who made the application, said, "Then of course we shall not take up the licence."

Mr. A. Milne, of Messrs. Thomas, Saxby & Milne, chemists, at the Ormonde Villas, Cheltenham. It was stated that the business at Montpellier Road had been removed to the premises for which the application was made, and that if the present application was granted no application would be made for the renewal at Bayshill Lodge.

The Leeds Licensing Justices have consented to the removal of the off wine-licence held by Mr. E. T. Robinson, chemist and druggist, from 87A to 117 Camp Road, Leeds.

We are informed that the application by Mr. G. Hellens, chemist and druggist, before the Totnes Licensing Sessions (*C. & D.*, February 11, p. 209) was not for a renewal of a licence held by Mr. Hellens, but for the transfer of a grocer's wine-and-spirit licence to Mr. Hellens.

From Various Courts.

At the Blackpool County Court on February 9, the action brought by Mrs. S. E. Denton to recover 10s. for alleged damage to a piano stage from Mr. J. H. Watson, chemist and druggist, of 67 Warbreck Road, Blackpool, was dismissed.

At the Greenwich Police Court on February 10, Ernest Everett (34) and Clara Moss (22) were committed for trial on a charge of uttering counterfeit coin. The woman had tendered a bad florin to Mr. E. S. Morris, chemist, Catford, in payment for some boric acid (*C. & D.*, February 11, p. 208).

At Oldham on February 13, Mabel S. Jones (16), employed at the High Street branch of Messrs. J. & J. Thompson Co., Ltd., chemists, Oldham, was bound over on a charge of stealing money by altering items in receipts. It was stated that accused, whose pilfering had practically been encouraged by her parents, had taken about 50l. home during the past year.

At Bradford on February 9, Harry Connell and Charles Twidle, both of Leeds, were committed for trial at the next Assizes on a charge of breaking, on December 15, into the house at 173 Bradford Road, Shipley, of Mr. A. E. Rogerson (of Messrs. M. Rogerson & Son, chemists) and stealing 4l. 2s. 4d. in money and two rings. It was alleged that one of the stolen rings was found in their possession on arrest. Both men pleaded an *alibi*.

At the inquiry held at Sheffield on February 13 into the death of Mr. John Bentley, chemist and druggist, 58 Crescent Road, Sharrow, who died from a self-inflicted wound in the throat, it was stated that the suicidal death of deceased's son in September last had preyed upon his mind ever since. The Coroner expressed deep sympathy with the bereaved family. A verdict of suicide while temporarily insane was returned.

At the Southwark Coroner's Court on February 13, during an inquest on Rosina Armstrong, aged 2, the mother said she asked Mr. Thomas Whales, chemist, 41 London Road, London, S.E., for some medicine for the child, who was suffering from diarrhoea after eating an orange. She knew the chemist was not a doctor, but the treatment cost less. A neighbour also said that she used to go to Mr. Whales for medicine, but after being warned by a doctor at St. Thomas's Hospital she ceased to do so. A verdict of death from natural causes was returned, with

a rider to the effect that "it is not a right and proper thing for a chemist to prescribe for anybody."

At the Southwark Coroner's Court on February 13, the following colloquy ensued between the Coroner (Dr. F. J. Waldo) and Miss Charlotte Kemp, who said she made "babies' soothers." The Coroner: Do you mean soothing syrup or comforters that they put in their mouth? Witness: The comforters. Coroner: Oh! Those dreadful things! Mothers drop them in all the dirt of the street and pick them up and pop them into the babies' mouths without wiping them. I have seen them do it very often. Doctors tell me they are dreadfully dangerous things. And you make these at a chemist's shop, eh? Witness: No! At Messrs. S. Maw, Son & Sons', of Aldersgate Street.

At Boston on February 8, a farm waggoner was charged with administering poisonous or injurious drugs to his employer's horses. Mr. L. White, who prosecuted on behalf of the Lincs Association for the Prevention of the Administration of Poisonous Drugs to Horses, said the drugs used by defendant were butter of antimony, oil of thyme, and aqua fortis, and he asked the Bench to express their disapproval of the action of Mr. A. H. Molson, chemist, Spalding, who, he stated, did not give any warning in regard to their use. The Chairman (the Rev. Canon Staffurth) at the conclusion of his remarks said, "I regret extremely that it did not seem fitting to the chemist to refuse to sell the drugs. The Bench think that with regard to the chemist there had been a strange oversight, and a strange forgetfulness of what is due of the chemist to the public."

Masonic Notes.

Mr. George Whitfield, Ph.C. (of Whitfield & Son), Past-President of the Scarborough Association of Pharmacists, was on February 8 installed as Worshipful Master of the Denison Lodge of Freemasons, No. 1248. Mr. Whitfield appointed three chemists among his officers—I.P.M., W. Bro. Edgar M. Chapman; S.S., Bro. E. Parker; and J.S., Bro. H. C. Senior.

Mr. G. Claridge Druce, M.A., Ph.C., has been re-appointed Charity representative for the Provincial Grand Masonic Lodge for Oxfordshire; he has also been installed as Eminent Preceptor of the Cœur de Lion Preceptory of Knight Templars, and has been admitted to the St. George's Priory of the Knights of Malta and chosen Herald in the Provincial Preceptory of Knight Templars of Oxfordshire.

There was a full agenda of business on the occasion of the meeting of the Galen Lodge at the Freemasons' Hall, London, W.C., on February 13, under the presidency of Bro. Geo. E. Pearson, W.M., when Mr. Hugh MacClimchie and Mr. Marmaduke Barrowcliff were initiated, Bro. C. F. Pitt was passed, and Bro. W. Sanford was raised. By request of the W.M. this last ceremony was given by W. Bro. R. Clay Suddow, P.G.D., and was greatly appreciated by the brethren. The Galen Lodge was one of the first, if not the first, of the class lodges, and it is representative of the chemical and pharmaceutical world. There have been four initiates during the last session, and the lodge is making rapid progress.

IRISH NEWS.

When sending newspapers to the Editor please mark the items of news to which you desire to call his attention.

Brevities

Mr. John Evans, Ph.C., 49 Dawson Street, Dublin, has been appointed Apothecary and Chemist to King George V.

The Ulster Bank, Ltd., have after protracted negotiations purchased from Mr. J. J. Cole, Ph.C., the site of his premises in Main Street, Cavan.

Messrs. Hayes, Conyngham & Robinson, Ltd., pharmaceutical chemists, Dublin, are opening shortly a branch business at 53 Clanbrassel Street.

Mr. T. Mathers Thomson, Ph.C. (Ireland) and chemist and druggist (Great Britain), has passed the Final examination of the Royal Colleges of Physicians and Surgeons in Ireland.

John O'Reilly, who was charged at Dublin on February 6 with causing the death of a fellow-workman by giving him glacial acetic acid to drink, has been remanded on bail (*C. & D.*, February 4, p. 176).

Dr. S. E. A. Acheson, druggist, 62 Cromac Street, Belfast, has been appointed physician to the Belfast Operative Bakers' Society. Dr. Acheson, who recently qualified as a medical man, is in practice at Albert Bridge Road.

Mr. J. Conor O'Farrell, Ph.C., Morehampton Road, Dublin, has passed the midwifery part of the Final examination of the Royal Colleges of Physicians and Surgeons. He has also obtained the L.M. diploma of the Rotunda Hospital.

The tincture of squill supplied to the Midleton (co. Cork) Guardians has been certified by the analyst as below standard. It was found, however, that in the meantime the stock of the tincture has been used up, and it is therefore impossible to have it replaced. The contractor has sent a fresh supply to the medical officer.

The Sir James Haslett memorial medal awarded annually by the Chemists and Druggists' Society of Ireland has been won by Mr. Samuel Haydock, of Ballysillan, Belfast. Mr. Haydock, who has been with Mr. Jas. Walker, pharmaceutical chemist, High Street, Ballynahinch, co. Down, for some time, secured the highest marks at the examinations of registered druggists held in Ireland during the past year.

The Local Government Auditor has called attention to the fact that although the committee of the Limerick Lunatic Asylum to decide the merits of eighteen samples of soap sent the samples to an analyst, his classification was disregarded in favour of a soap made in the locality. The auditor states that the submission of the samples in the circumstances seemed to be a farce. The committee decided to take no action on the auditor's report.

Workmen's Compensation Act.

At Belfast County Court on February 9, Robert Thompson, a labourer, brought a request under the Workmen's Compensation Act for arbitration. Mr. A. M. Dougan, druggist, 117 Oldpark Road, Belfast, being the respondent. Applicant stated that he met with an accident to his left arm on November 15 while assisting a slater who was at work at the roof of Mr. Dougan's house. For Mr. Dougan it was contended that Thompson was not employed by him, but by McMaster, the slater. His Honour refused the application.

SCOTTISH NEWS.

When sending newspapers to the Editor please mark the items of news to which you desire to call his attention.

Brevities.

"The Central Pharmacy" has been opened at 5 King Street, Inverkeithing.

Mr. Duncan Stewart, Ph.C., 69 Albert Street, Kirkwall, has taken Mr. Bernard Heddle into partnership. The firm-name will be Stewart & Heddle.

Edinburgh.

It is rumoured that other two pharmacies will be closed after the May term.

It has been ascertained that arsenic was responsible for the deaths at the Dalkeith supper party, but, though the police have interviewed all the chemists in the neighbourhood, it has not yet been discovered how the poison came to be present in the coffee.

Mr. Peter Cowie, whose death by accident in South Africa was reported in the *C. & D.*, February 4, served his apprenticeship with Mr. Middleton, Brunsfield Place, Edinburgh, after which he was employed by Messrs. Stonham & Son, Maidstone, until he volunteered for service in South Africa as an Army compounder in May 1903. He held the medal with two clasps.

Glasgow and the West.

The Medical Hall in Cromwell Street belonging to Dr. Gunn has been closed.

At Ayr on February 10, Sheriff-Substitute Shairp sentenced James Macdonald to forty days' imprisonment

with hard labour for selling to various persons a preparation which he fraudulently represented to be a deadly rat-poison. His charges for the stuff ranged from 3d. to 30s. One victim, on finding the preparation did not fulfil the purpose for which it was sold, caught a rat and fed it on the preparation, on which it seemed to thrive.

Dundee and District.

The premises of Mr. D. Mortimer, chemist and druggist, Brook Street, Broughty Ferry, were entered by thieves on Thursday night, February 9, and the contents of the till removed.

The position of the proposed Closing Order for Dundee chemists is interesting. The promoters (leading members of the Pharmacists' Association) took the advice of the Chemists' Defence Association's solicitors before proceeding, and got an opinion entirely favourable to the scheme. On the other hand, Mr. Chas. Kerr drew the attention of Mr. J. R. Hill, Edinburgh, to the draft Closing Order, and it was brought before the last meeting of the N.B.B. Executive, when Mr. Hill was instructed to write to the Secretary of the Forfarshire Chemists' Association pointing out reasons why it is considered that certain conditions of the Closing Order are incompetent and cannot be enforced under the Shop Hours Act, 1904. Briefly, Mr. Hill's points are these: Whereas the condition "A" says the door of the shop must be effectually fastened to prevent anyone entering the shop after the closing hour, yet the Act says the shop may be kept open after the closing hour for exempted trades, and Mr. Hill says no condition imposed by a local authority can override the liberty reserved by the Act. As to the condition "B" which prohibits the use of attractive lights after the closing hour, Mr. Hill asks how would it ever be possible to say that an artificial light is shown unnecessarily? He points out the danger of attempting to dispense medicines without fully lighting the shop, and recalls the case at Greenock where nux vomica powder was given instead of liquorice powder. Mr. Hill has submitted objections in similar terms to the Pharmacists' Association, but neither of the two Associations intend moving on the lines suggested. However, it is understood that individual members have written to the Town Clerk on the lines of Mr. Hill's criticisms. The matter comes before the Town Council at the meeting on March 2 for further consideration.

LEGAL REPORTS.

TRADE LAW.

A Company's Debt.—In the City of London Court on February 14, before Judge Lumley Smith, K.C., A. Garstin & Co., Ltd., 159 Aldersgate Street, London, E.C., sued Stuart & Co., Ltd., chemists, 4 Parade High Street, Watford, for 7l. 2s. 4d. trade goods supplied. The defence was that the plaintiffs were suing for goods which had been supplied to their predecessors, Howard & Co.—Mr. J. E. Griffiths, one of the directors of the defendant Company, said he had not even ordered some of the goods sued for.—Mr. H. Strouts, plaintiffs' solicitor, said all the orders sued on were given by the defendant company since the incorporation of the company.—Mr. Griffiths said that the correct name of the defendant company was Stuart & Co., Cash Chemists, Ltd.—Judge Lumley Smith said that the defendants were evidently trying to get out of it by saying the name was wrongly put in. He found for the plaintiffs, with costs. Defendants had paid the amount of debt into court, so it was only a question of costs.

High Court Cases.

REEVES' PAINTS.

In the Chancery Division on February 10, Mr. Justice Parker had before him the case of Reeves & Sons, manufacturers of artists' colours, against Boots Cash Chemists (Lancashire), Ltd., on a motion to restrain an alleged passing-off, previous hearings of which have been reported in the *C. & D.* Mr. Martelli, K.C., for plaintiffs, now stated that the motion was launched upon three specific cases of passing-off at Liverpool and Southport, following certain matters of which plaintiffs considered they had cause for complaint. One of the three instances was admitted, and was said by defendants to be due to an ignorant saleswoman. The other two were denied. The plaintiffs did

not accept either the statement or the denial. The evidence was contested, and it was obviously a matter that could not be tried on motion. He suggested, therefore, that unless Mr. Romer, K.C. (who was on the other side), was prepared to submit to an order on the admitted instance there should be no order on the motion, and the matter should stand until the trial of the action.

Mr. Romer: I am not prepared to submit to anything.

His Lordship: There will be no order on the motion except that the costs be costs in the action.—A suggestion was made by his Lordship that as it was easy for a mistake to be made by some of the numerous employees of the defendant company, the matter might be settled by the defendants undertaking to see that their servants were more careful in future.

Mr. Martelli: This is the culminating point of what has been going on for years.

Mr. Romer: That is untrue. It is because of these suggestions that the difficulty arises. The matter could have been settled if we had been approached in a proper way. Messrs. Boots feel very strongly about the charges made against them.

CHEMISTS' ACTION AGAINST ACCOUNTANTS.

On February 9, before the Lord Chief Justice, in the King's Bench Division, Henry Squire, Cash Chemist, Ltd., 8 Staple Inn, Holborn, sued Messrs. Ball, Baker, Deed, Cornish & Co., 1 Gresham Buildings, Basinghall Street, to recover damages for alleged negligence and breach of duty in the auditing of the accounts of the plaintiff company. The defendants denied that they had been negligent.

Sir Edward Clarke, K.C., opening the case on behalf of the plaintiffs, stated that the defendants, a firm of accountants, were employed by his clients as auditors in respect of the accounts of that company. It was alleged that defendants had acted carelessly in the matter, and that the plaintiff company had suffered much damage. The defendants denied any negligence, and the question was whether defendants had been negligent as alleged in discharging duties for which they had been paid fees out of the assets of the company. One of the objects of the plaintiff company had been to acquire and to take over as a going concern this business of chemists, dentists, etc., carried on in Deptford, Rotherhithe, Poplar, Camden Town, Hammersmith, Kentish Town, Marylebone, and elsewhere, as well as at Newman Street, Oxford Street, under the style of Henry Squire, Cash Chemist. The business had been carried on for about ten years prior to December 1, 1903, when Mr. Charles Clement Reece, who had carried it on, entered into an agreement with the plaintiff company, under which the latter took over the business, assets and liabilities. One of the principal questions in that action would be regarding alleged inaccurate increases which had been made in the stock (particularly in 1904, 1905, and 1906, and made, so counsel alleged, by certain persons at one time connected with the company), and which were not noticed by the auditors. Counsel explained that on the strength of the defendants' reports, the defendants having audited the accounts before the company was formed, the company was registered with a share capital of 10,000l., of which about 6,000l. was issued. After the company was formed the defendants were appointed auditors year by year, and upon their audit the company issued 5,000l. debentures, believing that the assets justified it. The company gradually got into difficulties, and in July 1908 the whole of the business—said Sir Edward Clarke—was sold for the sum of 4,500l. The business had lost at the rate of nearly 40l. a week, and the net result of the whole thing was that the debenture-holders received 9s. 6d. in the pound on their debentures. The creditors of the company got nothing, and the shareholders in the company lost all their money.

Evidence in support of the plaintiffs' case was given by Mr. John Philipps Mead, solicitor and chairman of the plaintiff company. His examination was concluded on Friday, when he was cross-examined by Sir Edward Carson, K.C., his Lordship also putting questions. The hearing was adjourned until Tuesday, February 14, when evidence for the defence was given by Mr. C. W. Cornish, a member of the defendant firm. This was largely concerned with

the accuracy of the stock-sheets supplied to the firm, suspicion as to which did not arise until 1907. Evidence was also given by Mr. F. E. Temple, Mr. John B. Ball, and others.

Sir Edward Carson said it was plain that the defendants were within their rights in accepting the certificates signed by responsible officials as to the accuracy of the stock-sheets. If they could not do that their task would be an endless one. Sir Edward said there was no evidence on which the defendants could be properly accused of negligence.

Wednesday was devoted to counsel's addresses. (This was Sir Edward Clarke's seventieth birthday, and the Lord Chief Justice complimented him.) His Lordship also dealt with an action brought by Mr. John Phillips Meid against Messrs. Ball, Baker & Co. for alleged negligence, which was denied. On Thursday judgment was given for the defendants in both actions, with costs.

WIGHTMAN v. LITTLEJOHNS.

This case was described in the list as "detinue and motion for judgment," and was mentioned to Mr. Justice Lush on February 13 as settled. In announcing the settlement, Mr. Paddon, for the plaintiff, said his Lordship would not be troubled with the case, and all he had to do was to ask that judgment might be given on the terms agreed between the parties. Mr. Le Breton, for the defendant, assented. Judgment was entered accordingly.

A SETTLEMENT.

In the King's Bench Division on February 14, in Mr. Justice Pickford's Court, Mr. Lewis Thomas, K.C., mentioned the case of Sangers v. Doree, and said it was a claim for goods sold and delivered. A defence had been put in that the goods were not in bulk up to sample. He was now able to say that all suggestions of the kind had been withdrawn and there had been consent to judgment for 100l. and costs, this amount including money paid into court. Judgment was entered accordingly.

BANKRUPTCY REPORTS.

Re Thomas White the younger, formerly carrying on the business of a chemist and druggist at 31, Hillidge Road, Hunslet.—The public examination of this debtor was held at the Leeds Bankruptcy Court, before Mr. Registrar Cauterley, on February 15. Particulars were given in the *C. & D.*, January 21, index folio 76. He now explained that the business was chiefly in pennyworths, and that he is not a registered chemist.—The examination was closed.

Re John Smith, 6 Eversfield Place, St. Leonards-on-Sea, Sussex, Chemist and Druggist.—The following are creditors: Eldridge & Morris, London (62l.); Freedman, London (63l.); H. T. Trust, London (51l.); Mrs. Dewhurst, St. Leonards-on-Sea (200l.); C. R. Harker, Staggs & Morgan, Ltd., London (21l.); T. Hodgkinson, Prestons & King, London (about 13l.); R. Fry & Co., Ltd., Brighton (about 12l.); John Bell, Hills & Lucas, Ltd., London (about 12l.); and William Lane, Upper Holloway (12l.). Preferential creditors: Rent, 53l.; rates, etc., 22l. The debtor was examined at Hastings Bankruptcy Court on February 14, and after he gave full particulars in regard to his business history (*C. & D.*, February 4, index folio 173), and stating that if the business had been sold as a going concern the creditors would have been paid in full, the examination was closed.

Re John Robert Sturdy, Sheerness-on-Sea, etc., Chemist and Druggist.—This debtor has traded at four different places: 8 Marine Parade, Sheerness-on-Sea (where he also resides); 77 High Street, Mile Town, Sheerness; 37 High Street, Blue Town, Sheerness; and 3 Market Place, Leighton Buzzard, Bedfordshire. He filed his own petition in the Rochester Bankruptcy Court on January 5, and the public examination will take place at the Rochester Bankruptcy Court on February 20. The debtor's summary of affairs is as follows: Gross liabilities, 1,753l. 8s.; unsecured creditors (104), 1,214l. 15s. 3d.; creditor fully secured, 538l. 4s. 4d. (estimated value, 400l.); surplus to contra 14l. 15s. 8d.; creditor for rent, 91l.; rates, 55l. 4s. 2d.; Sheriff's charges estimated at 7l. 3s. 10d. Assets: Cash in hand at date of filing, 3l. 16s.; cash deposited with solicitor for costs of petition, 7l.; stock, 1,140l.; goodwill, trade-fixtures, etc., 670l.; furniture, 50l.; book debts, (good) 117l. 14s. 1d., (doubtful and bad debts) 42l. 5s. 11d.; surplus from contra, 14l. 15s. 8d. The causes of

failure are given by the debtor as "being sued upon a covenant contained in a mortgage deed of September 2, 1910, given to secure 320l. advanced by my wife upon the premises 37 High Street, Blue Town, Sheerness." At the time of filing, the debtor had executions levied by the Sheriff's officer on his premises at Sheerness and Leighton Buzzard by the mortgagee in question. He is forty-nine years of age, and commenced business as a chemist at 77 High Street and 8 Marine Parade, Sheerness, in March 1898. He carried on business successfully until four or five years ago, when he met with severe competition, and the result is trade has gone down. He does not hold that he is insolvent. He has kept various books, but the ledgers had not been posted up for some time. The unsecured liabilities include 500l. alleged to be due to debtor's father and 50l. to his brother, and the rest are for ordinary trade-debts. The fully-secured creditor is the mortgagee of 37 High Street, Blue Town.

DEEDS OF ARRANGEMENT.

Lycass, Will am Armstrong, 5 Ann Street, Belfast, Pharmaceutical Chemist.—Petition for arrangement, accompanied by the customary affidavit of assets and liabilities. Dated, February 6; filed, February 9. Unsecured liabilities, 1,400l.; estimated net assets, 300l.

Coleman, William, Westwick Street, Norwich, and Brundall, Manufacturing Chemist.—Trustees: G. T. Feasey, 9 Old Jewry Chambers, London, E.C., C.A., and another. Dated, February 3; filed, February 10. Secured creditors, 51,500l.; liabilities unsecured, 10,379l.; estimated net assets, 14,337l.

Spencer, William Frederic, 92 High Street, Ventnor (I.W.), Chemist.—Trustee: W. C. Black, 147 High Street, Newport, I.W. Dated, February 7; filed, February 13. Liabilities unsecured, 359l.; estimated net assets, 150l. Among the creditors are: Barclay & Sons, Ltd. (42l.); S. Maw, Son & Sons (10l.); Wright, Layman & Umney, Ltd. (18l.); F. S. Cleaver & Sons, Ltd. (15l.).

LIMITED COMPANIES.

New Companies Registered.

The letters P.C. mean Private Company within the meaning of the Companies Act, 1907, and R.O., Registered Office.

CARMAN MANUFACTURING CO., LTD. (P.C.).—Capital 300l., in 1l. shares. Objects: To carry on the business of manufacturers of and dealers in medicinal preparations, etc. The first directors are F. T. Carter and Mrs. E. Carter. R.O., 453 Brixton Road, S.W.

CENTURY CHEMICAL CO., LTD. (P.C.).—Capital 2,500l., in 1l. shares. Objects: To carry on the business of chemists, druggists, etc. The first subscribers are D. L. Couch, 27 Wilnot Road, Leyton, technical chemist; T. D. Morson, 14 Elm Street, Gray's Inn Road, W.C., manufacturing chemist; and E. Neumann, 7 and 8 Idol Lane, E.C., consulting chemist.

S. BATCHELOR, LTD. (P.C.).—Capital 1,500l., in 1l. shares. Objects: To take over the business of a dispensing and family chemist and druggist carried on by H. J. E. Batchelor (as administrator of the late A. E. Batchelor) at Fareham, Hants. The first subscribers are Mrs. S. Batchelor, 15 West Street, Fareham; J. W. Roach, Rushes Villa, Petersfield, gentleman; and W. E. Kirkman, 5 Bank Terrace, New Milton, chemist.

Company News.

EMPIRE MANUFACTURING CO., LTD.—Mr. W. Tyndall, of Colmore Row, Birmingham, was appointed receiver and manager on February 3, 1911.

W. D. MORRIS, LTD.—The petition of Butler & Crispe, patent-medicine dealers, for the compulsory winding-up of W. D. Morris, Ltd., was, on the application of counsel, dismissed, without costs, by Mr. Justice Swinfen Eady in the Companies' Winding-up Court on Tuesday, February 14. There was no opposition to this course. Mr. R. F. Roberts, 54 St. John's Wood Road, N.W., ceased to act as receiver or manager on January 27, 1911.

SPRATT'S PATENT, LTD.—The report for the year ended December 31, 1910, states that the profit and loss account (including 7,976l. from last account), after providing in the trade account for expenses of management, maintenance of premises, plant, and machinery, etc., and providing a reserve of 2,000l. against possible bad debts, shows a balance of 47,464l. The directors recommend a dividend for the second six months at the rate of 7s. per ordinary share,

making, with the interim dividend, 11 per cent. for the year; to write off from first item of assets 5,000*l.*, and to add to special reserve 5,000*l.*, leaving 7,144*l.* to carry forward. The 21,400*l.* debentures of Spratt's Patent (America), Ltd., were redeemed in May last, and 10,000*l.* of the fresh issue of first debentures made by the American company have been allotted to the company.

BIRTHS.

BROWN.—At 1 Glenorchy Terrace, Edinburgh, on February 12, the wife of David Rainy Brown (J. F. Macfarlan & Co.), of a daughter.

COLEMAN.—At 249 Narborough Road, Leicester, on February 14, the wife of Walter Graham Coleman, of a daughter.

FORGAN.—At 15 Chancelot Terrace, Ferry Road, Edinburgh, on February 9, the wife of Robert B. Forgan, chemist and druggist, of a daughter.

PECK.—At Halesowen, Hill's Road, Cambridge, on February 7, the wife of E. Saville Peck, M.A., Ph.C., of a daughter.

RANKINE.—At 17 Links Place, Musselburgh, on February 10, the wife of A. Landale Rankine, chemist and druggist, of a daughter.

SCHOLLAR.—At 29 Sussex Place, Queen's Gate, S.W., on February 12, the wife of N. Howard Schollar, chemist and druggist, of a son.

WATERWORTH.—At Hull on February 10, the wife of Harold P. Waterworth, chemist and druggist, of a daughter.

DEATHS.

BENTLEY.—At 58 Crescent Road, Sharrow, Sheffield, last week, Mr. Michael John Bentley, chemist and druggist. Mr. Bentley passed the Modified examination in 1869.

CLIFT.—At Dorking, on February 1, Mr. Joseph Clift, chemist and druggist, aged eighty-five. Mr. Clift was a native of Reading, where he was apprenticed. He next took up a situation with Messrs. Wright & Bond, 209 Oxford Road, Manchester, and then went into business at Dorking, where he specialised in agricultural requirements. It is said of him that in one case he spent 1,000*l.* in advertising a speciality, and only received back 9*l.*, but another 1,000*l.* brought about the desired result. Mr. Clift took considerable interest in local municipal life, and was for one year an *ex officio* member of the bench of magistrates, resigning because of an adverse vote of the ratepayers in regard to the purchase of the water company's undertaking. He was President for some years of the Literary Institute, and was a sportsman and angler of no mean ability. One of his hobbies was the breeding of fowls, and he took many prizes at poultry-shows. His wife died in 1879. Mr. R. Goodwin Mumbray, an old friend of Mr. Clift's, writes:

"Seldom indeed can we review a life so completely successful in its undertakings. Joseph Clift was never satisfied with anything short of completeness; he would always have the best of everything—be it a drug, a flower, or a pair of boots—his motto was 'That only is cheap which is noticeably good,' and this principle was his leading characteristic in every transaction. Unostentatious, neither unduly elated by success, nor depressed by a reverse, his companionship was always agreeable, while sincerity and warmth of friendship endear him to everybody who knew him intimately, and is never to be forgotten.

HARMAN.—At the Medical Hall, Carrick-on-Shannon, on February 10, Mr. Robert D. Harman, Ph. C. He was a native of Lurgan, and was registered in 1892.

JONES.—At Herne Bay, on February 4, Mr. William Jones (Messrs. S. Maw, Son & Sons), aged fifty-six. Mr. Jones entered the employment of the firm in 1869, and was attached to the instrument factory for a time. He then became curator and fitter at Middlesex Hospital, where he remained for eight years, coming into contact with the senior staff of the hospital, including Sir Henry Morris.

Mr. Bland Sutton, and Sir A. Pearce Gould. He then returned to the Aldersgate Street house, acting as fitter, stock-keeper, traveller for instruments, and, during the past seven years, assisted Dr. Henry T. Maw in the management of the surgical instrument department. He had a long illness, and was buried at Norwood Cemetery on Saturday, February 11, a large number of friends being present.

KNAGGS.—At 145 Thomas Street, Dublin, on February 10, Mr. Samuel F. Knaggs, chemist and druggist, late of Capel Street. Mr. Knaggs was registered in 1891.

WALTON.—At Etches' Nursing Home, Douglas (I.O.M.), on February 10, Mr. Joseph Woodruff Walton, chemist and druggist, 427 Bury New Road, Higher Broughton, Manchester, aged forty-one. Mr. Walton, who was apprenticed to Mr. H. T. Marple, passed the Minor in 1891, and on returning to the North of England he undertook the management of several Manchester pharmacies, his last engagement being in the retail department of Messrs. James Woolley, Sons & Co. He purchased the business at Bury New Road in 1895. Mr. Walton has been on the Council of the Manchester Pharmaceutical Association since 1894, and before becoming hon. librarian to the Association he acted for a time as its hon. secretary, and also as Vice-President. Mr. Walton had gone to the Isle of Man owing to a breakdown in health.



MR. J. W. WALTON.

WILSON.—At 4 Whitehall Court, London, S.W., on February 13, Florence Jane, wife of Mr. John William Wilson, M.P. (Allbright, Wilson & Co., Ltd.), of Perrycroft, Malvern.

PERSONALITIES.

Notes for this section sent to the Editor should be authenticated, and must not be in the nature of advertisements.

MR. T. A. COOK (of Edward Cook & Co., Ltd.) has been elected a Vice-President of the West Ham Hospital.

MR. A. E. H. BLACKBURN, Ph.C., of Mottershead & Co. and a director of Benger's Food, Ltd., has been elected President of the Broughton College Old Boys' Association, in succession to Major Frank H. Bowater, of London.

MR. J. C. SHENSTONE, F.L.S., formerly of Colchester, has presented his collection of photographic negatives of about 1,000 British seed-plants to the British Museum of Natural History, Cromwell Road, London, S.W. All the negatives are Mr. Shenstone's own work.

MR. J. E. H. WATSON, chemist and druggist, King Street, Norwich, was presented with a valuable piece of plate at the annual dinner of the Coulsford Ward Conservative Association on February 9, to mark his retirement from the Town Council after thirty-three years' service.

MR. W. A. BINGHAM, chemist and druggist, has been elected Hon. Secretary of the recently formed Bourne-mouth Lincolnshire Society, and Mr. F. W. Hornby, Ph.C., has been appointed a member of the committee. Messrs. Stewart Hardwick and W. O. Saul are other chemists connected with the movement.

THE inaugural dissertation prepared by Dr. S. Judd Lewis, Ph.C., for his D.Sc. degree of the University of Tübingen, has now been printed. The thesis is entitled "Studien über das Elementare Zirkonium," and deals with the analytical methods and physical characteristics of the element zirconium. Dr. Lewis, who passed the Major in 1890, and has since taken the degree of B.Sc. (Lond.), the F.I.C., and the D.Sc. (Tübingen), practises as an analytical and consulting chemist at 122 Newington Causeway, London, S.E.

TRADE NOTES.

SULPHO-VASELINE FOR DOGS.—The Chesebrough Manufacturing Co., 42 Holborn Viaduct, London, E.C., have been awarded a silver medal for sulpho-vaseline at Cruft's International Dog Show, which was held last week at Islington.

POTTER'S NEW TELEPHONE NUMBERS.—Messrs. Potter & Clarke, Ltd., wholesale druggists, 60 to 64 Artillery Lane, London, E., ask us to notify that their new telephone numbers are: London Wall 1018 (two lines) and Central 4961.

"P.A.T.A. YEAR-BOOK."—The edition for 1911 has just been issued. It gives first the reasons for the existence of the Proprietary Articles Trade Association and a list of its officials. Then follows the names of the firms whose goods are protected, a list of protected articles, and the names of all the members of the Association. The price-list portion is most useful to every retail chemist.

MESSRS. KNOLL & Co., 8 Harp Lane, London, E.C., send us a note in regard to a case of attempted suicide with "Bromural." The person took twenty 5-grain tablets, but suffered no bad effects whatever. It is characteristic of this hypnotic that it is practically non-toxic. Some time ago two similar cases were published, in which doses of twelve and fifteen of the tablets were taken without harm.

PHARMACAL MACHINERY.—A new edition has been published of the price-list of the F. J. Stokes Machine Co., Philadelphia, Pa., whose agents in this country are Messrs. Thompson & Capper, 51 Piccadilly, Manchester. The list gives illustrations and particulars of a large variety of pharmaceutical and chemical machinery and apparatus, including tablet-machines, capsule-machines, coating-pans, triturate-machines, mills, presses, stills, and drying-apparatus.

MESSRS. INGRAM & ROYLE, LTD., 26 Upper Thames Street, London, E.C., inform us that in consequence of the death of Mr. H. W. Royle (the late managing director), Mr. Henry Ingram Royle (Mr. Royle's eldest son) and Mr. George Ernest Cockman are joining the board as directors. They have for a long time past, in co-operation with the late Mr. H. W. Royle, taken an active part in the management of the business, Mr. Ingram Royle having been in the firm for some thirteen years, while Mr. Cockman entered the firm thirty years ago. The business will be under their joint control in future, and the staff will not be altered in any way so that the business will go on as heretofore.

RADIUM TREATMENT OF GOUT.—Professor W. Hiss, of the Berlin University, finds that radium is "an extremely valuable and indispensable means of treatment" in gout and rheumatism, and states that he has achieved by this means highly satisfactory and gratifying results. The remedy is used in the form of draughts, baths, and injection, and these are supplied in this country by Mr. W. Martindale, 10 New Cavendish Street, London, W. The preparations are radium drink-cure, in cartons containing three bottles, of which thirty cartons are required for a complete cure; the bath-cure in bottles, thirty of which are directed to be used for a course of baths, and a preparation for injection supplied in cartons containing three injections. The activity of these preparations is constant.

PHILLIPS' PHOSPHO-MURIATE OF QUININE.—This preparation has recently been introduced by The Chas. H. Phillips Chemical Co., 14 Henrietta Street, Covent Garden, London, W.C., and has, we understand, been well received by prescribers. It is an aromatic syrup of agreeable flavour containing phosphoric acid and the phosphates of potassium, magnesium, lime and iron combined with $\frac{1}{4}$ gr. of quinine muriate, and $\frac{1}{120}$ gr. strychnine, in each fluid drachm. Besides acting as an appetiser and stomachic, the preparation is of special service as a tonic after influenza or in nervous troubles, and is equally suitable for children and adults. It is put up in 10-oz. and 48-oz. bottles. Chemists who would like to bring it under the notice of their medical friends can get sample bottles from the manufacturers at the above address.

OMNOPON.—The Hoffmann-La Roche Chemical Works, Ltd., 7 and 8 Idol Lane, London, E.C., make an opium preparation containing the total alkaloids of the drug in a readily soluble form suitable for hypodermic injection. The preparation is sold in this country under the registered name of "Omnopon." It should be mentioned that the same substance goes by the name of "Pantopon" on the Continent and in the United States, and much of the clinical work on the matter appears under this name. It was owing to difficulties of a legal nature that the word "Omnopon" had to be registered in place of the original designation of the drug. Omnopon is sold in ampoules of 1 c.c., in boxes of three, six, and twelve, selling at 1s., 1s. 10d., and 3s. each; as tablets ($\frac{1}{30}$ gr.), in bottles of 20 at 1s. each; and as powder, in bottles of $\frac{1}{4}$ oz. at 6s. The manufacturers are sending out an instructive pamphlet about Omnopon, which is a reprint of an article by Professor H. Sahli in the "Therapeutische Monatsschrift" for January of last year. Chemists interested in the matter should write for a copy of this reprint.

WESTMINSTER WISDOM.

The Week in Parliament.

MR. GLYN-JONES'S BILL.

In consequence of the want of success which he met with in the recent ballot for private members' Bills Mr. Glyn-Jones has not yet given notice of his intention to introduce his Bill to amend the Pharmacy Acts in so far as the use of the word "Pharmacy" is concerned as a description of premises carried on by persons who are un-registered. The hon. member can give notice at any period during the Session to introduce his Bill, but having been unsuccessful in the initial ballot it is quite unlikely that any material progress can be made with his proposals unless the Government afford special facilities for the purpose. Mr. Glyn-Jones has already become known in the House as the authority on all pharmacy matters, and is taking an active part in the general business of the House. On Monday he put a question to the Home Secretary in regard to the working of the Aliens Act, 1905, and made his *début* as a blocker, opposing the second reading of the London County Council (General Powers) Bill, some provisions of which may affect business men injuriously if they are not modified.

POISONS AND PHARMACY ACT, 1908.

Captain Craig asked the Home Secretary in the House of Commons on Monday, February 13, whether by-laws had yet been made by the Pharmaceutical Society under the Poisons and Pharmacy Act, 1908, Section 4 (b). Mr. Churchill replied that he was informed that before formulating any by-laws under the section the Pharmaceutical Society of Great Britain has to dispose of certain preliminary questions connected with the educational curriculum of pharmaceutical chemists and of chemists and druggists, and that the Society is now actively engaged on these questions.

BANKRUPTCY LAW AMENDMENT.

The fact that the Speech from the Throne contains no reference whatever to the question of bankruptcy law reform, upon which a Departmental Committee reported a few Sessions ago, is being brought to the notice of the President of the Board of Trade by Mr. A. Rendall, M.P., who was a prominent member of the Departmental Committee which considered the whole question of imprisonment for debt. Upon this subject also there is no likelihood of any legislation being proposed in the course of the present Session, but in regard to the question of the reform of the bankruptcy laws a Bill has for some time past been prepared by the officials of the Board of Trade, at first under the *régime* of the present Home Secretary, and the Department is only awaiting a suitable opportunity to bring it forward in Parliament.

The President of the Board of Trade has informed Mr. A. Rendall, M.P., that the valuable report which was presented by the Select Committee on the condition of the bankruptcy laws has had the careful consideration of his department and he hopes that it may be found possible to introduce an amending Bill in the course of the present Session.

REBATE ON MOTOR SPIRIT (MEDICAL PRACTITIONERS).

The Financial Secretary to the Treasury informed Mr. Ginnell in the House of Commons on February 9 that if he would furnish the Commissioners of Customs and Excise with the names and addresses of any medical practitioners in Ireland who have claimed, but have not been paid, rebate, inquiry will be made into the circumstances in each instance.

SCOTLAND AND THE SHOPS BILL.

We are informed that the Scottish Office has already prepared a series of amendments and alterations to the Government Shops Bill to meet the special requirements of Scottish traders. It is doubtful, however, whether any material progress can be made with the Bill this Session. The notice on the paper is "Shops—Bill to consolidate, amend, and extend the Shops Regulation Acts, 1892 to 1904."

PHOSPHATE BAKING-POWDER.

In reply to Mr. Horatio Bottomley, M.P., in the House of Commons on Tuesday, February 14, Mr. John Burns, President of the Local Government Board, stated that his attention has been called to the adulteration of bread by means of the treatment of flour with acid phosphate of calcium, derived from the action of sulphuric acid on bones. Some time ago he directed an inquiry to be made regarding the matter, and a report is now in preparation.

PATENT MEDICINES.

In the House of Commons on Wednesday, February 15, Mr. Stephen Collins asked the Home Secretary if he is now prepared to say whether he is favourable to the view held by his predecessor at the Home Office and will appoint a Departmental Committee for the purpose of considering the advisability of issuing regulations making it compulsory on all manufacturers of medicines liable to patent-medicine duty to print on the labels or the bottle or other vessel in which such is sold the full nature of the ingredients of such bottles or vessels, as well as the diseases which they purport to cure. Mr. Churchill, in a written reply, said he is making inquiries into the matter, and will inform him of the decision arrived at in due course.

IMPORTS OF INDIGO.

The President of the Board of Trade has furnished the Earl of Ronaldshay with the following statement showing the quantity and value of natural indigo and synthetic indigo imported into the United Kingdom in each of the undermentioned years:

Year	Natural Indigo		Synthetic Indigo	
	Quantity Imported	Value of Imports	Quantity Imported	Value of Imports
	Cwt.	£	Cwt.	£
1903	7,641	111,445	39,042	147,325
1907	11,116	151,297	41,379	158,481
1908	8,644	132,875	37,761	134,052
1909	10,051	139,335	33,494	117,100
1910	3,380	43,054	28,196	101,249

The imports of indigo substitutes are not separately recorded in the trade returns of the United Kingdom.

ARSENIC IN U.S.A.—The production in 1910 amounted to 2,652,000 lb., against 2,015,880 lb. in 1909.

THE SELBORNE SOCIETY has enlarged its magazine, which embraces "Nature Notes," and a most interesting journal is the result. Particulars with regard to the magazine and the Society can be obtained from the Hon. Secretary at the new offices of the Society, 42 Bloomsbury Square, London, W.C.

REMOVALS FROM REGISTER.—By a notice gazetted on February 10, the following companies have been struck off the register at Somerset House, London: George's Cougn Balsam and Infant's Powder, Ltd.; Grimshaw Drug and Dental Co., Ltd.; Jackson Drug Co., Ltd.; Maltova, Ltd.; Taylor's Drug Stores (Blackburn), Ltd.; and Tillott's Drug Stores, Ltd.

WINTER SESSION.

Brief Records.

Cambridge Pharmaceutical Association.—A lecture on "Milk: Its Composition and Analysis and its Relation to Hygienic and Economic Questions" was given by Mr. J. E. Purvis, M.A., of St. John's and Corpus Christi Colleges, in the Chemical Lecture Theatre on Tuesday evening, February 14.

London Chemists' Association.—A meeting of the General Purposes Committee was held at 19 Kensington Terrace, London, S.E., on February 13, to consider the statement to be made regarding the Association's policy *re* the draft curriculum scheme. No agreement was arrived at. Mr. Idris was in favour as the only chance of getting back dispensing from the doctors. Mr. Truman considered apprentices handicapped enough and hard enough to get already. Mr. Douglas also said that pharmacy in its present state did not warrant a curriculum. Mr. Pentney was also opposed to change.

Huddersfield Chemists Association.—At the meeting held on Tuesday evening, February 14, at the Queen Hotel, Mr. Spurr presided. Mr. R. H. West was elected a member of the Association. It was resolved to approve the attitude of the P.A.T.A. in regard to the sub-division of wholesale drug orders. A debate ensued on the *proposed Curriculum*. The general opinion was that though a scheme of the kind would be beneficial there would be difficulties in the way of its working, especially in country towns. It was resolved that the Association should support the scheme, at the same time expressing the hope that the Council would arrange details so as to cause as little inconvenience as possible to the trade.

Drug Stores Association of Great Britain.—The annual meeting of the Nottingham branch was held on February 7 at the Victoria Station Hotel, Mr. A. D. Hutchinson presiding. The report of the Treasurer showed a balance in hand, and the Secretary's was considered to be satisfactory. The reports were adopted. The officers appointed for the ensuing year were as follows: President, Mr. A. D. Hutchinson; Vice-Presidents, Messrs. Barton, Hunt, Pinder, and Harris; Treasurer, Mr. Hooley; Hon. Secretary, Mr. C. Manfull; Committee, Messrs. Smith, Jepson, Bunting, Harper, and Clarke. It was decided to hold a special meeting of the Dinner committee on February 21 to make the final arrangements for the annual dinner.

Salford Pharmacists' Association.—At the meeting held last week the proposals for the division of the *Minor Examination* and establishment of a curriculum were discussed. The general opinion was that the present regulations are quite stringent enough, and that, if anything, the examination should be made easier. Eventually Mr. Harrop proposed the following resolution, which was seconded by Mr. J. Jones, and unanimously carried: "This Association considers the whole scheme is premature. Before a curriculum is established we consider that the dispensing of prescriptions in this country should be secured to the only qualified persons—that is, the pharmacists of Great Britain. Until this is done, we consider it useless to discuss these proposals."

Chemists' Assistants' Association.—A meeting was held at 73 Newman Street, London, W., on February 9, with Mr. E. Thompson (Vice-President) in the chair. Mr. R. E. Lownsbrough (who took the place of Mr. W. H. Robb, absent through illness) followed up a former lecture by giving some useful remarks on *The Circulation of the Fluids of the Body*. Mr. Lownsbrough, who added another to the series of lectures with which he has enlightened and interested the members of the Association, dealt with blood and lymph circulation. The origin of varicose veins, hemorrhoids, and aneurism was mentioned, while blood-pressure charts were explained. Many questions were asked at the conclusion of the lecture to which Mr. Lownsbrough briefly replied.

Derby and District Chemists' Association.—A special afternoon meeting was held at the Bell Inn, Derby, on February 8. Mr. W. Elmitt (President) was in the chair. A goodly company welcomed Mr. F. J. Gibson, of Wolverhampton, a member of the Pharmaceutical Council, who, with Mr. A. J. Chater, had accepted the invitation of the Association to lay before the members particulars respecting the *present position of pharmaceutical affairs*. Mr. Gibson explained the reasons for the establishment of a curriculum, and dealt with the chief criticisms of the draft scheme issued by the Council. The Government Report on Unqualified Medical Practice, as well as the principal sections of the Poisons and Pharmacy Act, 1908, were also explained. A good discussion ensued, and expressions of confidence in the Council were tendered. A vote of thanks terminated one of the most satisfactory meetings in the history of the Association. The members then had high tea.

Oxford and District Chemists' Association.—A meeting was held at the Golden Cross Hotel on Wednesday, February 8, Mr. J. A. R. Burbank (President) in the chair. Alderman Clayton, Messrs. C. Bellamy, J. Dolbear, H. Oddy, J. Palmer, and H. C. Goodall (Hon. Secretary and Treasurer) were also present. Mr. S. H. Clegg was proposed for membership by Mr. H. C. Goodall, and seconded by Mr. J. Dolbear. The Secretary stated that he had received from the Pharmaceutical Society a copy of the draft scheme for a division of the *Minor Examination* and a curriculum of study. After a lengthy and animated discussion it was proposed by Mr. J. Dolbear, and seconded by the President, that the final consideration of the matter be adjourned until the next meeting of the Association. In the meantime the Secretary was requested to interview those country members who would be unable to attend the March meeting, and get their opinion on this proposed scheme, and prepare a report to be submitted at the next meeting.

Northampton and District Chemists' Association.—A meeting was held at the Black Boy Hotel, Northampton, on February 7. Mr. L. North presided, and there were also present Messrs. W. McKinnell, Dennis, Geo. Ingle, F. C. Ashford, Gatehouse, W. McKinnell, J. S. Rolfe, and F. Cowdery (Hon. Secretary). The chief business of the evening dealt with the proposed division of the *Minor Examination*, and an animated discussion took place. Mr. D. McKinnell considered that any lengthening of the examination would be welcome, as the amount of time at present given in dispensing and chemistry is not sufficient to show whether a man has a thorough knowledge of his work. If longer papers on these and on all theoretical subjects were given, followed by a short *viva voce*, the examination might be of greater value. As it is at present, the examiners can act arbitrarily. Mr. Ashford was supposed to anything that would increase the stringency of the examination, and proposed the following resolution: "That this meeting of the Northampton and District Chemists' Association protest against any division of the *Minor examination* which would increase its stringency, and suggest that if the division be decided upon there shall be a corresponding increase in the standard of the examination, which should comprise written papers on all theoretical subjects." Mr. Rolfe introduced the question of the increased expenditure which a division of the examination would entail on students, and wondered what their position would be between the two parts of the examination. Mr. Dennis was sceptical of the test of attending lectures, and Mr. North agreed that mere attendance at lectures was no criterion of study. Mr. D. McKinnell seconded Mr. Ashford's proposition, and it was carried.

Middlesbrough Chemists' Association.—At a special meeting of the members held on February 3 the following communication to the Pharmaceutical Council *re* the *Minor Examination* was adopted: "The Middlesbrough Chemists' Association, after careful consideration of the Society's proposals for the division of the *Minor*, and establishing a curriculum, is of the opinion that the same would, in effect, raise the standard of the examination beyond what is required for the safety of the public, and would raise the cost of qualification out of all proportion to the remuneration which is derived from the trade. Our chief criticisms and suggestions are as follows:

Re the Curriculum.—We consider:

That it is unfair to country apprentices, who lack facilities for attending evening classes. (One of the chief facilities which is lacking is an adequate train-service.)

That advanced science certificates (*i.e.*, S.K.) should be accepted for the Intermediate, in lieu of so many lectures on those subjects.

That under this scheme private tuition is practically abolished.

That there is no recognition of study done previous to registration.

That if hours of assistants and apprentices are limited by Parliament, employers will not be disposed to give them facilities for study, especially if time taken for study is to be included, or counted as business hours. This will adversely affect those who cannot afford to devote their full time to the curriculum at a school of pharmacy.

That the increased cost of examination will discourage many from even attempting to qualify.

That it will increase the difficulty of obtaining apprentices in rural districts.

That the curriculum should not come into force till 1920.

Division of the Examination.—We approve of the division of the examination, but we suggest that the division should be on the lines of the present examination; the practical portion to constitute one examination, and the theoretical portion the other. Both examinations to be taken within a fixed time, failure to pass the final portion, at the second attempt, to cause the whole examination to be taken over again. We do not approve of the new clause which introduces

a good deal of chemistry again into the examination under the name of practical pharmacy."

Sheffield Pharmaceutical and Chemical Society.—Mr. G. T. W. Newsholme presided at a meeting on February 15, when it was decided to invite the Organisation Committee of the Pharmaceutical Society to visit Sheffield on March 12 after their visit to Leeds the previous day.

Fifeshire Pharmaceutical Association.—Mr. David Gilmour presided at a representative gathering of Fife chemists held at Thornton on Wednesday, February 15, when the principal business was consideration of the curriculum scheme. Mr. W. L. Currie, Vice-President P.S.G.B., was present, and spoke about the scheme, but the meeting was strongly opposed to it, and the direct negative was moved but was ruled out of order. Mr. David Storrar said the scheme would be unworkable in the county, and his motion to ask the Council to give greater freedom in the Intermediate studies was carried.

Liverpool Chemists' Association.—Mr. G. V. C. Last presided at a meeting held on February 9, and reported that Mr. T. J. Smith had resigned his seat on the Council of the Association. Mr. A. C. Abraham was co-opted to fill the vacancy. Dr. Symes referred to the rumour that the Chancellor of the Exchequer is to reduce the spirit-duty in the forthcoming Budget, and moved that the Association should write to the Chancellor saying that the Association heard of this with pleasure. Mr. Hare seconded the motion, which was carried. Subsequently the members (Messrs. Barr, Collins, Egan, Hare, Howard, Jones, Lomax, Marsden, Pater-son, Prebble, Robinson, Symes, Valpy, Waddington, Whalley, and Wokes) in private discussed the Unqualified Medical Practice Report.

Hull Pharmacists' Association.—Mr. R. F. Jones presided over a well-attended meeting at the Grosvenor Hotel on February 14. The *Minor Examination Scheme* was the principal business. The Chairman spoke in favour of it, so did Mr. Robson, Mr. King, and others. The following resolution was agreed to: "That this Association approves of the curriculum as a whole, and suggests that when a candidate satisfies the examiners in some subjects, but fails in others, the subjects passed be placed to his credit on condition that he presents himself for the remaining subjects within a given period." On Thursday, February 9, Mr. Rymer Young addressed a well-attended meeting of the pharmacists of Hull and District at the Station Hotel. The address that he gave on the above scheme influenced the Association's decision.

Bath Pharmaceutical Association.—Mr. D. J. Evans presided over a meeting on February 9, when Mr. D. J. Williams, Ph.C., F.C.S., read a paper on the *Education of the Pharmacist*; and after a full discussion of the proposed examination and curriculum scheme, an agreement of the members was obtained on the following points:

1. That the present examination of from $7\frac{1}{2}$ to 9 hours is insufficient to test a candidate's knowledge.

2. Against a curriculum for the Intermediate, which would entail hardships on apprentices living in country districts.

3. That a test in practical pharmacy and dispensing be substituted for botany in the Intermediate.

4. That a six-months course for the Final be sufficient.

It was decided that Messrs. Williams, Evans, and Hallett should draw up a report and send it to the Pharmaceutical Council.

Portsmouth Pharmacists' Association.—The second annual meeting was held at the County Club, Southsea, on Wednesday afternoon, February 15, Mr. T. A. White presiding. The Treasurer's report showed the finances of the Association to be in a healthy condition, the balance in hand being over 20/. Two guineas was subsequently voted to the Pharmaceutical Benevolent Fund, and a preliminary grant made towards the local expenses of the B.P. Conference meeting. Mr. Rogers (Treasurer) was warmly thanked and congratulated on his report, which was adopted. The Vice-President (Mr. Bell) proposed the re-election of Mr. T. A. White as President. Mr. Fox seconded, and the motion was carried with enthusiasm. Mr. S. Rogers was unanimously re-elected Treasurer, and Mr. T. Postlethwaite Secretary, owing to the resignation of Mr. T. O. Barlow, who has his hands full of Conference work. The following were elected members of committee: Messrs. Baker (Cosham), Smith (Gosport), Atterbury, Barlow, Donaldson, Rhodes, Sparrow, and Tremlett.

Blackpool and Flyde Pharmacists' Association.—Mr. F. Boothroyd presided at the annual meeting held at the Palatine Hotel, Blackpool, on February 13. The Secretary (Mr. Bailey) submitted a satisfactory report of the year's work, and the Treasurer (Mr. Greenwood) reported a satisfactory balance in the bank. Both reports were adopted, and after the retiring officers had been thanked the following appointments were made: *President*, Mr. H. P. Withers; *Vice-Presidents*, Messrs. Mayson and Huddart; *Hon. Treasurer*, Mr.

F. Boothroyd; *Hon. Secretary*, Mr. D. J. Bailey; *Committee*, Messrs. Laurie, Sankey, Turver, Greenwood, and Johnson; *Hon. Auditors*, Messrs. Parker and Smithurst. An ordinary meeting followed, at which a letter was read from the Town Clerk regarding witnesses' fees. It was decided not to support the Bolton Association's proposal *re* examination centres. It was decided to hold the meetings in future on the second Monday of the month when possible.

DINNERS.

THE annual dinner of the Oldham Pharmaceutical Association was held at the Café Monaco on February 7, when a good number of members, with their wives and friends, assembled to do justice to the fare provided. After dinner an excellent programme of music was supplied by Messrs. Swinburne, Lees, and Kirby, while the Lancashire dialect recitations of Mr. Newby were thoroughly appreciated. Altogether the evening was most enjoyable.

THE annual dinner of the Stockport Pharmacists' Association was held at the White Lion Hotel on February 9. Mr. J. C. Arnfield (President) was in the chair, supported by Mr. T. Kay, J.P., Dr. H. G. Smeeth (Chairman of the Health Committee of the Stockport Corporation), Dr. H. E. Corbin (medical officer of health), Mr. E. T. Neatheroat (member of the Council of the Pharmaceutical Society), Messrs. W. P. Orrell, W. Dodge, J. Nicholson, R. T. Forbes, G. Bennett, K. Oldfield, T. Woodruff, F. H. Bowden, E. Hardecastle, J. H. Franklin, T. O. Arnfield (Hon. Secretary). Mr. W. P. Orrell proposed the toast of "The Pharmaceutical Society," to which Mr. Neatheroat responded. He claimed that after seventy years' work the Society has a record and a position of which every member should be reasonably and justly proud. He also spoke in high terms of the educational policy, and said the object of the School of Pharmacy was to send out well-trained young men who would tend to raise the trade to a much higher level than was possible in many other trades. Mr. J. Nicholson proposed the toast of "The Visitors," to which Dr. Corbin and Mr. K. Oldfield replied. Dr. Smeeth gave the toast of "The Association," congratulating the President and his son, Mr. T. O. Arnfield, on their efforts to resuscitate the Association. Mr. T. O. Arnfield replied, and the President responded to the next toast, "The Chairman," which Mr. F. H. Bowden proposed. There was a good musical programme.

THERE was a representative gathering of members of the Newcastle-on-Tyne Pharmacists' Association at the fourteenth annual dinner held on February 8 in the Grand Hotel, Barras Bridge. The President (Mr. W. Buckley) was in the chair, and among those present were the Deputy Lord Mayor (Councillor C. S. Shortt), the Sheriff (Councillor R. H. Millican, J.P.), the Vice-President of the Pharmaceutical Society (Mr. W. L. Currie), Alderman J. Harrison (Sunderland), Councillors Atkins and Johnstone; Drs. T. M. Allison, J. Dagger, and W. Nevins; Messrs. G. Foggan, E. Dean, G. Whitehead, H. Bailes, W. Kerse, T. M. Clague, R. Cubey, W. Pesod, F. Gilderdale, H. W. Noble, C. Russell, R. McClumpha, R. Low, W. Wyatt (J. Woolley, Sons & Co., Ltd.), W. Nimmo, A. H. Purse, and R. H. Bell (Sunderland); E. C. Layne, W. R. Gray, T. H. Fleming, J. Graham, A. Turnbull (B. W. & Co.), H. M. Morgan (Alfred Bishop, Ltd.), J. F. Simpson, G. Weddell, and W. Kinnis. After the loyal toast, Mr. F. Gilderdale proposed "The Pharmaceutical Society," and Mr. W. L. Currie, in reply, referred to his scheme for the establishment of a curriculum and dividing the Minor. "The Lord Mayor and Corporation of Newcastle-on-Tyne" was proposed by Mr. T. M. Clague, who mentioned that twenty-five years ago, when he came to Newcastle, he bore a letter of introduction to Mr. R. H. Millican, the present Sheriff. The Deputy Lord Mayor (Councillor C. S. Shortt) and the Sheriff responded. "The Newcastle-on-Tyne Pharmacists' Association and Kindred Associations" was proposed by Mr. W. Nimmo (Sunderland), and Messrs. G. Weddell and W. Kerse replied. Glees and songs were rendered during the evening by the Cathedral Quartette and Mr. J. White, Mr. J. Hobkirk being the accompanist.

THE annual dinner of the West Ham and District Association of Pharmacists was held at the London Tavern, Fenchurch Street, London, E.C., on February 9. The chair was taken by the President (Mr. T. H. Seed), and among those present

were the following: Mr. J. W. Ainslie (Parke, Davis & Co.), Mr. A. Arncliffe (Leo & Co.), Mr. A. D. Baker (Jas. Townsend & Co.), Mr. W. R. Barnes, Mr. Bayliss (Evans Sons Lescler & Webb, Ltd.), Mr. W. W. Blades, Mr. A. Boyes (Baiss Bros. & Sons, Ltd.), Mr. C. W. Bromly (Bovril, Ltd.), Mr. E. Burtlett, Mr. H. T. Butler (Canival, Ltd.), Mr. R. Feaver Clarke (North Kent Pharmacists' Association), Mr. A. H. Cleland, Mr. J. Coleman, Mr. C. Cooke-Jones, Mr. A. Crocker, Dr. A. P. Cummings, Mr. A. H. Darby (Barclay and Sons), Mr. W. Dart (F. S. Cleaver & Sons), Mr. R. S. Eley, Mr. D. C. Evans, Mr. J. E. Evans (Hon. Secretary and Treasurer), Mr. F. E. Foster, Mr. Freese (T. Christy & Co.), Mr. Grant (Robert Blackie), Mr. W. S. Glyn-Jones, M.P., Mr. T. Godbold (Price's Patent Caudle Co., Ltd.), Mr. Hewitt (Allen & Hanburys, Ltd.), Mr. A. E. Howling, Mr. E. James (Jas. Boulter & Co.), Mr. H. H. Jowett, Mr. A. H. Lewis (Ford, Shapland & Co.), Mr. Harold Lynn, Mr. Malo (Burroughs Wellcome & Co.), Mr. C. W. Martin (S. Maw, Son & Sons), Mr. J. H. Matthews, Mr. J. H. Mellows, Mr. E. Miller, Mr. H. C. Miller (Melanocoe Co.), Mr. A. Mortimer, Mr. F. C. Orange (Fassett & Johnson), Mr. Pearson (T. Kerfoot & Co.), Mr. A. D. Phelps, Mr. W. Potter, Mr. S. R. Powell, Mr. W. A. Raley (The British Drug Houses Ltd.), Mr. A. E. Ramsay, Mr. E. J. Raynor, Mr. E. V. Rippin, Mr. A. Shillock (Meggeson & Co.), Mr. H. Super (Vice-President), Mr. H. Thompson, Mr. H. A. Trimby, Mr. J. C. Unney, Mr. W. P. Want, Mr. C. F. Ward, Mr. E. White, Mr. T. R. Williams (Wright, Layman & Unney), and Mr. A. C. Wright.

After dinner and the loyal toast, Mr. J. C. Unney proposed

"THE HOUSES OF PARLIAMENT,"

remarking that it was a matter of congratulation that a pharmacist was to reply.

Mr. W. S. Glyn-Jones, M.P., who was received with great applause, said it had been his ambition to see pharmacy represented in Parliament, as he had seen how valuable it is to have in that great Legislative Chamber someone with special knowledge to impart to the officials of Government Departments when it was wanted. The Government would not give much time to private members this side of Easter, but the Departments are always dealing with matters which affect the pharmacist's calling. The Board of Trade, for example, are dealing with the question of ships' medicine-chests, and if, when the matter comes before the House, justice is not done to their calling, he should have something to say on the matter. Then there is the Blue-book on Unqualified Medical Practice, which purports to contain the results of inquiries made at the instance of the General Medical Association. As soon as he saw the report he realised that there is another side of the question; and although he would prefer that the two professions of medicine and pharmacy should co-operate instead of engaging in civil war, he is quite prepared to give the House of Commons some first-hand information regarding the things that go on in doctor's surgeries. Mr. Glyn-Jones then gave as an example the case of a medical man who through ignorance burnt some children's heads with carbolic acid; and added that he hoped, however, wiser counsels would prevail, and the General Medical Council would see that it would be better that any steps taken should be jointly with the Pharmaceutical Society. Mr. W. Potter then gave the toast of

"THE PHARMACEUTICAL SOCIETY."

to which Mr. E. White responded. In the course of his reply Mr. White said that the draft scheme for dividing the Minor and instituting a curriculum had been somewhat misunderstood. There is no intention of increasing the stringency of the examination, it is quite stiff enough at present. The Pharmaceutical Society must, however, keep in touch with the rest of the world and conduct its examinations in accordance with modern ideas of education. The percentage of failures in the examination is high, but what struck him was that men who at present go through a curriculum feel no hardship in the examination. When a curriculum is instituted there will be fewer failures, and it will involve no more expense to the candidate, who will be properly prepared and will not fritter away his money by trying to pass the examination without having acquired the necessary knowledge. The Council has submitted the scheme with the intention of constructing a curriculum in accordance with the wishes of the chemists of the country. Indications are wanted, and he hoped these would be forthcoming. Mr. White then referred to the Report on Unqualified Medical Practice and the Benevolent Fund. Mr. A. D. Phelps at this stage made a presentation to the President, whose birthday it was. The next toast, "The West Ham Association," was proposed by Mr. Feaver Clarke in a thoughtful speech and replied to by the President. The final toast was that of "The Visitors." A collection was made for the Benevolent Fund, and realised 47. 10s. Musical items were rendered during the evening.

Four in One.

At the Frascati Restaurant, Oxford Street, London, on Wednesday evening, February 15, a joint meeting of the Croydon Pharmacists' Association, London Chemists' Association, Thames Valley Pharmacists' Association, and Western Pharmacists' Association was held under the presidency of Mr. H. R. Procter for the purpose of discussing the Minor examination draft scheme. It had been arranged that Mr. T. Maben should open for Croydon, Mr. T. H. W. Idris for London, Mr. C. J. G. Bunker for Thames Valley, and Mr. C. T. Allen for the West London. The company numbered about eighty, the seating accommodation being overtaxed. The opening addresses represented the feeling of the Associations on whose behalf they were made. Mr. Idris gave his own personal opinion on the subject, as no agreement on the matter had been arrived at by the members of the London Chemists' Association. Mr. Bunker said that Thames Valley considered a curriculum undesirable in the present position of pharmacy. Mr. Maben desired a six-months training for the Qualifying examination only, while Mr. Allen stated that the Western pharmacists are uncompromisingly in favour of a compulsory curriculum. The statements of the principal speakers are abstracted below.

Mr. Idris said that he felt when piloting the Poisons and Pharmacy Bill in Parliament during 1908 that the personal title of "Pharmacist" was the most valuable asset that we could obtain; and he feels now that anything which raises the standard of education and training of the pharmacist must enhance the value of that title, and as the value of that title becomes more widely recognised, the demands for its functions by the public will be more and more insisted upon. The value must be greatly enhanced by such a training as a proper curriculum is sure to impose. He referred to the danger to the public entailed by the same man supplying, dispensing, or administering medicines, and giving a death certificate, and said that pharmacists must be prepared for the growth of public opinion adverse to this condition. He pointed out that the imposition of a curriculum by the Act of 1908 is optional on the part of the Pharmaceutical Society, and remarked that he did not know how far the necessity of imposing one is requested or required by a Government Department. He was inclined to agree with the view that under a curriculum the cost of preparing for the examination will be smaller, and was fully persuaded that the means of obtaining the qualification through a properly arranged course of training and study will be much more pleasurable to future students than the present arrangement is to a very large number of students. From personal experience he was more and more impressed with the great importance of practical work in the preparation for qualifying, and favoured acceptance by the Pharmaceutical Society of certificates from local teaching institutions for the Intermediate examination.

Mr. Bunker, after reviewing the causes leading up to the present state of affairs in pharmacy, said that it was only natural that the knowledge for successfully negotiating examinations should be systematically acquired. While in early days apprenticeship was sufficient, later it was found expedient and necessary to acquire knowledge at schools of pharmacy, which led to cramming. Coming to the curriculum he asked, looking at pharmacy from a business point of view, if the proposed curriculum be imposed it was one they could conscientiously put before a prospective apprentice. He was doubtful if lecture facilities are available in many villages and smaller towns from which the majority of apprentices are drawn. The lectures, even if spread over three years, would amount to one and a-half hours on two days a week without reckoning time taken up in travelling. It would require twenty weeks to cover the curriculum for the Intermediate if taken after apprenticeship. The pharmacist primarily takes the apprentice for his own sake, and the above, together with the Shop Hours Bill, will add serious conditions to the terms of apprenticeship. He believed that in chemistry the proposed time schedule is more than that for the Inter. B.Sc. examination of the London University, so that with a little enlargement upon the curriculum as set down a student could get the higher status of a University degree and possibly better remuneration. The curriculum for both examinations practically meant that two academical years would be required, devoted in most cases after apprenticeship which meant an increased financial strain. He had seen the difficulties under which present students labour in this respect, often resulting in them entering the ranks of the great army of unqualified competitors. Putting all this before parents and guardians means that a very small number will become apprentices. The mem-

bers of the Thames Valley Association desired him to say that they do not think the present is an opportune time for introducing a curriculum and that a candidate shall, as in the past, gain his knowledge how, when, and where he chooses. They also think that in the examination itself a candidate shall be given credit for those subjects in which he passes and not be required to take them on any subsequent occasion. Mr. Bunker also suggested that the matter be not gone into by the Pharmaceutical Society's Council until after the coming election, and, further, that the Council candidates state very clearly their views on the subject.

Mr. Maben stated that experience proved that a curriculum of some sort is at present a necessity, but it should not demand an excessive expenditure of time or money relative to the students' future life-work. The principal of a school of pharmacy informed him that one-third of his students passed at the end of three months' study, another third in six months', while the remainder required nine or twelve months. As any compulsory curriculum must be suited to the average student, it is obvious that there is no use in starting with anything less than six months. He thought it would be a great mistake to aim too high to start with, for it would mean a serious loss of dignity to the Pharmaceutical Society if in a year or two they found they were in an untenable position. He proceeded to criticise the scheme outlined by the Committee of the Council, dealing first with time required and cost. Mr. Maben had no fault to find with the idea of putting scientific subjects first in the divided examination, but he would remove botany, which should be taught concurrently with materia medica, to the Final examination. He also favoured the institution of written and practical papers in both examinations. He also submitted that when a compulsory curriculum is adopted a part of the examining board must consist of men who are actually engaged in teaching pharmacy. The proposals already published in an article by Mr. Maben in *THE CHEMIST AND DRUGGIST* were referred to next, and the speaker said that the pass-lists in science examinations of the Board of Education showed that there was a supply of youths trained in elementary chemistry available. He considered that the requisite study for the Intermediate examination should be carried on wherever suitable opportunity offers, and that the compulsory curriculum, which should not exceed six months, should only precede the Final examination.

Mr. C. T. Allen was uncompromisingly in favour of the institution of a curriculum and offered to convince anyone of its necessity. Loud cries of "No! No!" were called forth by a remark that a section of the craft suffered from "chronic objectitis" and were sufficiently Radical to oppose any progress in pharmacy. Mr. Allen spoke of the absurd policy of the Preliminary not being taken prior to apprenticeship and said that a curriculum was bound to create a high standard of practical efficiency among pharmacists of the future.

The speakers in the subsequent discussion were:

For a Curriculum: Messrs. Cooper, Barrett, Cofman, Drayton, Proctor, Browne, Morgan, Marshall, and White. *Against:* Messrs. Douglas, Woollons, Higgs, Lawrence, Schollar, Clement, Pentney, and Knight. During the discussion the apprenticeship question bulked large, the curriculumists seeing in it a means of filling in the deficiencies of the present system. Much was also said about "raising the status of pharmacy." The opposition's main point was that a curriculum is to be imposed so as to provide for better education in dispensing which chemists do not get. Other points were that local associations should endeavour to get classes in chemistry formed locally and that country apprentices would be placed at a disadvantage if the scheme is passed. Mr. White, in a clever speech at the close of the discussion, said, in reply to questions, that the Pharmaceutical Council want to know if pharmacists desire a curriculum not necessarily the one outlined. The scheme before them was purely tentative, while the division of the Minor would be optional upon candidates, who could take the qualification either in two examinations or one. Mr. White's conciliatory speech disarmed much of the opposition, with the result that a resolution in favour of (1) a curriculum, (2) division of the Minor, (3) no increased stringency of that examination, and (4) that it may be taken in one or two stages, was carried by forty-nine votes to seven. Mr. Higgs's amendment to the effect that there be no curriculum was defeated by forty-seven votes to thirteen. Mr. Higgs caused great merriment by saying, when, illustrating the application of the Minor syllabus to modern business, that as regards the addition of estimation of resin in tincture of jalap he had never sold any of that galenic during his thirty-two years in the trade.

TRADE REPORT.

The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers receive the goods into stock, after which much expense may be incurred in garbling and the like. Qualities of chemicals, drugs, oils, and many other commodities vary greatly, and higher prices than those here quoted are charged for selected qualities of natural products even in bulk quantities. Retail buyers cannot, therefore, for these and other reasons, expect to purchase at the prices quoted here.

42 Cannon Street, London, E.C., February 16.

THE week under review has again been noticeable for the number of articles which show a considerable advance as the result of a much-improved speculative and consumptive demand. The excitement in menthol and peppermint oil has now subsided, but both products are quite firm. Cod-liver oil is the predominant feature of the week, and with an excited market prices have advanced about 25s. per barrel, the result of poor fishing. It is doubted in some quarters whether such an advance is justified at such an early stage of the fishing. Bromides were unexpectedly advanced by 3d. on potassium, and other salts in proportion. Crude camphor is very firm and scarce, while a further advance in English is imminent. Japanese refined has been active at advancing rates. Much higher figures are cabled from Smyrna for opium, where speculators are taking advantage of the damage to the growing crop to hoist up prices. Both morphine and codeine are very firm in consequence. Cassia oil, which up to a week ago was difficult to sell, has sharply advanced. Both lemon and bergamot oils are again dearer. Copaiba and Peru balsam are firm. Ergot is easier to arrive, but spot is very scarce. Jalap is steady and cubebs easier. Quicksilver is dearer in second-hands. Carbolic acid is easier in some directions. Turpentine is 2s. 6d. higher. Altogether the week has been active, and it is to be hoped that the improved volume of business will be maintained. The following table shows the principal alterations:

Higher	Firmer	Easier
Bromides	Anise oil (c.i.f.)	Carbolic acid
Camphor	Cantharides	Cubebs
Camphor oil	Copper	Ergot (c.i.f.)
Cassia oil	sulphate	
Clove oil	Saffron	
Cod-liver oil	Turmeric	
(Norweg.)	(Madras)	
Lemon oil	Wood-oil	
Opium	(Hankow)	
Peppermint oil		
Quicksilver		
Turpentine		

Cablegrams.

BERGEN, February 15:—The Norwegian cod-fishing has made small progress owing to hindrance by stormy weather. Market is still advancing, and for finest new non-congealing oil the value is about 123s. 6d. per barrel, c.i.f. terms.

NEW YORK.—February 18:—Business is fair. Opium is firmer at \$5.25. Bromides have advanced 6c. per lb. Hydrastis is firm at \$2.75. Copaiba is steady at 38c. Cascara is unchanged, and peppermint oil is firm at \$2.75.

London Markets.

ANISE OIL, STAR, which has been in easier tendency lately, has taken an upward turn, business having been done in "Red Ship" brand for February-March shipment at 4s. 3d. to 4s. 4d. per lb. c.i.f.; on the spot prices are unaltered at 4s. 10d.

BALSAM, PERU.—Prices are well maintained, and a higher market is looked for, as stocks both at the port of shipment and on this side are now in much smaller compass; from 6s. 11d. to 7s. per lb. net is quoted as to quantity for stuff answering B.P. Codex.

BERGAMOT OIL continues to advance, the spot price for 38 to 40 per cent. esters now being from 16s. to 16s. 6d. per lb., and for shipment from 15s. 8d. to 16s. is quoted. From Sicily it is reported that the wintery weather has handicapped the pressing of the oil, and this has contributed to the higher market.

BROMIDES.—On Tuesday the market was somewhat startled with an advance in the price of bromides, the English quotation for potassium now being 1s. 5d., and powdered 1s. 5½d., ammonium bromide 1s. 10d., and sodium bromide 1s. 8d. per lb. For 1 cwt. lots potassium and sodium are 1½d. per lb. less, and ammonium 2d. per lb. less, all net cash without engagement. These prices show an advance of 3d. on potassium. In second hands only small parcels are available at about 1d. below the official rates.

BUCHU.—The *Armada Castle* has brought 19 packages from Cape Town, none of which are for the London market. There have been a few small sales of short broad from second-hands at between 4s. and 4s. 3d.; for good green ovals sellers ask 2s. 3d., with buyers at 2s. Longs are neglected. This year the arrivals in London amount to 74 bales, of which 13 only have been for this market. For shipment from the Cape the extreme price of 5s. c.i.f. is cabled.

CAMPHOR (CRUDE).—The Japanese Monopoly will probably not be able to offer until March; meanwhile refiners have to fall back upon the objectionable China quality, which is also extremely scarce. Second-hands report sales of a few cases Japanese "B.B." at 190s. spot.

CAMPHOR (REFINED).—It was thought probable that English refiners would have again advanced their prices, and in view of the crucial position of crude it is felt that another advance cannot be long deferred. One of the German refiners has advanced his price of bells to 2s. 1d. In Japanese refined a good business has been done, the chief run being on slabs, which have been sold on the spot at 1s. 8½d. to 1s. 9d.; 1-oz. and ¼-oz. at 1s. 9½d. to 1s. 10½d. To arrive, sales include slabs for January-March shipment at 1s. 7½d. to 1s. 8d.; January-February and March-April shipment at 1s. 8½d. to 1s. 8¾d.; 1-oz. at 1s. 9½d.; also slabs for February-March shipment at 1s. 9d., and April-May at 1s. 8½d. to 1s. 8¾d.; 1-oz. tablets for January-March at 1s. 9½d. to 1s. 9¾d., and May-June at 1s. 9½d.; ¼-oz. tablets for February-March at 1s. 10d. c.i.f.

CAMPHOR OIL, in sympathy with camphor, has advanced. White light Japan (s.g. 0.870 to 0.890) is offered at from 45s. to 47s. 6d. per cwt. according to quantity.

CANNABIS INDICA.—Small sales of genuine Bombay tops have been made at 4s. 7d. per lb., and this description is now scarce.

CANTHARIDES.—Russian are firmer on the spot, natural offering at 2s. 11d. per lb. net.

CARBOLIC ACID.—The tone is now easier in some quarters for forward delivery, it being possible to buy May-June delivery at 5½d. per lb. 39° to 40° C ice crystals in large drums. The recent large demand will shortly result in increased production.

CASSIA OIL is much dearer. Towards the close of last week more demand was shown, 80 to 85 per cent. c.a. selling at from 3s. 6½d. to 3s. 9d. per lb. spot, and to arrive sales included 20 cases at 3s. 4d. c.i.f. Since then a marked change has taken place, 80 to 85 per cent. having been dealt in from 4s. to 4s. 3d. on the spot, with 4s. 4d. asked, while 70 to 75 per cent. has been sold at 3s. 8d. To arrive sales include 80 to 85 per cent. at 4s. 4½d. c.i.f.

CHALK, PRECIPITATED.—Finest white is offered at 13l. 10s. in 5-cwt. casks, 14l. in 2-cwt. casks, and 14l. 10s. per ton net in 1-cwt. casks, free ex wharf London or c.i.f. U.K. ports in minimum lots of 10 cwt.

CINCHONA.—Further particulars of the Amsterdam auctions, to be held on February 23, show that the 10,428

packages weigh 924,218 kilos, and contain the equivalent of 58,152 kilos quinine sulphate. Of this quantity 814,052 kilos represents manufacturing bark containing 54,331 kilos quinine, and the remaining 110,166 kilos is manufacturing bark, containing the equivalent of 3,821 kilos quinine. The average percentage of quinine in the manufacturing bark is 6.67, as compared with 6.50 per cent. in January and 6.48 per cent. in December. At the London auction on Tuesday 700 packages offered, of which 413 packages sold at the average unchanged unit of $\frac{9}{16}$ d. per lb. The quinine contents of the bark was equivalent to about three tons. Of East India, 152 packages offered and 85 sold, comprising officialis, natural quilly chips, at $1\frac{1}{2}$ d. to $2\frac{1}{2}$ d., spoke shavings at $2\frac{1}{2}$ d., and root at $2\frac{1}{2}$ d. to $3\frac{1}{2}$ d. Of Java, 493 packages offered and 328 sold, including Ledgeriana stem chips, at $4\frac{1}{2}$ d. to 5d., root at $3\frac{1}{2}$ d. to $4\frac{1}{2}$ d., and branch at $2\frac{1}{2}$ d. to 4d., hybrid stem chips at $2\frac{1}{2}$ d., and Succirubra root and branch at $1\frac{1}{2}$ d. 55 packages Ceylon were bought in.

CLOVE OIL is 2d. dearer at 4s. 6d. per lb.

COCA-LEAVES.—The total weight of the 495 packages Java and Ceylon cocoa-leaves to be offered at Amsterdam on February 23 is 25,867 kilos.

COD-LIVER OIL.—We deal with the position editorially. Owing to the backwardness and poor results of the Lofoten fishing, prices in all directions are much dearer, and the bulk of agents early in the week were without quotations for new oil, their principals hesitating to name a price in view of the uncertain outlook. In one direction the extreme price of 140s. per barrel c.i.f. London was quoted on Monday for new oil for March-April shipment, and since then other agents have named 130s. to 140s. as the price for new, and sales have been made at both these prices. As is usual on an excited market, quotations show a wide variation, and holders of old oil only offer sparingly, the sales including (1910 and earlier) at from 115s. to 130s. per barrel spot. The chief demand has been for these second-hand parcels, of which a very fair quantity has been sold. In view of the fact that the fishing has barely commenced, consumers would probably do well to defer purchasing yet awhile, as it is possible that when the catch becomes normal (in March) lower prices will prevail.

Our Bergen correspondent writes on February 13 that stormy weather still prevails, and the cod fishing has made little progress up to date. The official report gives the following numbers to February 13:

	1908	1909	1910	1911
Catch of cod (millions)	2.4	3.4	3.6	2.1
Yield of cod-liver oil (hect.)	2,975	3,750	3,060	1,400
Livers for "raw" oils	1,560	2,200	2,400	1,420

From several fishing-places the reports are rather favourable, promising a fair catch as soon as the weather is calmer. On the market the tendency is rising, and holders have advanced their prices from one day to another. There are plenty of rumours, and it is difficult to give the actual market-value for non-congealing Lofoten oil, which is said to have realised up to 123s. 6d. per barrel.

COPAIBA is steady at from 1s. 9 $\frac{1}{2}$ d. to 1s. 9 $\frac{1}{2}$ d. per lb. for B.P. filtered. Higher prices are reported from primary markets, and there is a falling-off in supplies of genuine quality.

COPPER SULPHATE has advanced to 19l. 15s. to 19l. 17s. 6d. per ton for ordinary Liverpool brands for February-April delivery.

CUBEBS are easier, fair current quality offering at from 7l. 10s. to 8l. per cwt. The first-hand stock in London is 215 bags.

ERGOT is easier to arrive, offers being more plentiful, and it is possible to buy from Russia at between 3s. 8d. and 3s. 10d. c.i.f. On the spot, however, there is probably less than half a ton available, the prices for which are between 4s. 3d. and 4s. 6d. for either Russian or Spanish.

GLYCERIN.—Chemically pure continues very firm and comparatively scarce on account of the increased demand for dynamite quality, which commands the same price as c.p. Some of the makers are not sellers until April.

GUINEA GRAINS.—Good sound clean sell at from 102s. 6d. to 105s. per cwt. on the spot.

GUM ACACIA.—Soudan sorts are steady, with small sales at from 38s. to 40s. per cwt. for fair half-hard sorts. The market is practically bare of East Indian gums. Senegal gum is quiet, the value of Bas de Fleuve being 38s. per cwt. on the spot.

JALAP.—A small amount of c.i.f. business has been done at steady prices, but there is little disposition on the part of consumers to buy at the moment. The spot value is from 1s. 2d. to 1s. 4d. per lb. according to percentage.

LEMON OIL continues to advance, agents asking from 4s. 3d. to 4s. 4d. per lb. c.i.f., and on the spot prices for good brands range from 4s. to 4s. 3d. There is a fair inquiry, sales having been made up to 4s. 3d. c.i.f. A Palermo advice of February 11 reports that the winter has been exceedingly severe, and in consequence the production has been on a much smaller scale.

LIME-JUICE.—West Indian concentrated is steady, with a small business at from 18l. 2s. 6d. to 18l. 7s. 6d. More demand has been shown for raw West Indian at from 1s. per gal. upwards.

LIME OIL.—A fair business has been done in West Indian distilled at from 1s. 1d. to 1s. 2d. per lb. for common to fair. Hand-pressed is quiet at from 5s. to 5s. 3d.

LIQUORICE-ROOT.—Common natural has shown more demand at 11s. 6d. per cwt.

MENTHOL.—The excitement in this article continued well up to the close of the week, which wound up with spot sales of Kobayashi at from 16s. 9d. to 17s. and January-March shipment at 15s. 3d. c.i.f. This week the animation has subsided considerably, but the market has been none the less firm, the spot sales including Kobayashi at 17s. to 17s. 6d., and to arrive February-March shipment at up to 16s. 4 $\frac{1}{2}$ d. c.i.f. During the past two or three days the article has been "marking time" among the leading operators, and at the close 17s. 6d. is repeated as the nearest value for Kobayashi on the spot, with small sales thereat. It would appear that the United States have made large purchases in Japan—in fact, they are said to have bought up all available supplies. Extreme prices have been cabled from Japan this week—viz., 26s. to 28s. c.i.f. or menthol and oil combined.

MORPHINE.—Very firm at 7s. per oz. for hydrochlor powder, but makers are by no means anxious to book orders for quantity.

MUSK.—There is now little available on the spot, the recent imports having been cleared. The value of fine blue skin pile 1 Tonquin pod is 72s. 6d. per oz., old-style 54s. to 55s., and pile 3, 35s. Russian Cabardine is worth 19s. and China 25s. per oz.

OPUM.—Speculators in Smyrna are now endeavouring to force prices up considerably, and the rates cabled this week show a substantial advance, which precludes business—e. g., ten cases of 13 per cent. were offered at 17s. 2d. c.i.f., and in response to a bid of 15s. 4d. c.i.f. for 11 $\frac{1}{2}$ per cent. 17s. was asked. Spot sellers of Turkey druggists ask 15s., and small sales of Malatia and Tokat have been made at from 17s. to 18s.; Persian has also changed hands at 15s. 6d., but with few sellers 16s. is generally asked.

Writing on February 3, a Smyrna correspondent states that the sales amounted to 180 cases, of which 145 were for export and the remainder for speculators. Business opened at pts. 125 and closed at pts. 142 for Karahissar, or 15s. 6d. per lb. c.i.f. European ports. This advance, provoked by the cold weather, has given rise to various fantastic suppositions as to the damage sustained by the poppies. Should speculators try further to influence the market by purchases of one or two cases, large buyers would do well not to follow, as there is no authentic news with regard to the damage. Arrivals amount to 4,294 cases, against 1,835 cases.

ORRIS.—Mogador is firm at from 32s. 6d. to 35s. spot for fair to good on the spot.

PENNYROYAL OIL is very scarce and dearer, the value of French being 5s. 9d. per lb.—this in sympathy with peppermint oil.

PEPPERMINT OIL, like menthol, has turned quiet during the last two or three days, but it cannot be said that prices have declined. Before the close of last week Kobayashi on the spot sold at from 7s. 9d. to 8s., and there are still sellers of Kobayashi or Suzuki at 8s. To arrive, January-

March shipment has been sold at 7s. 6d. to 7s. 9d. to 8s. c.i.f., and February-March shipment at 8s. c.i.f. and sellers. This business applies to re-sale parcels, as the nominal quotation from Japan is 9s. 6d. c.i.f., with nothing offered. The recent activity is said to be due to American purchases in Japan, coupled with the short crop. In American H.G.H. a very fair business has been done at from 14s. 6d. to 14s. 9d. London terms, the market closing with sellers at 14s. 9d. "Tin" oil has ruled quiet, and prices show no change, it being possible to buy good brands at 11s. 9d. on the spot, which price has been paid, and to come forward 12s. is quoted.

QUICKSILVER has advanced to 9l. per bottle, and seconds to 8l. 17s. 6d.

QUININE.—There is a good consumptive remand at the unaltered rates of 63d. for second-hand German, 63d. for Amsterdam, and 64d. for Java. At the auction of quinine held at Amsterdam on February 10, 1,417½ kilos (50,000 oz. Ed. II.) was offered, of which 992½ kilos (35,000 oz.) sold at an average price of fl. 10 per kilo, against fl. 10.01 at the previous auction. The next auction will be held on March 3, and will consist of 1,417½ kilos (50,000 oz.).

SAFFRON is 1s. higher, offering at from 43s. to 43s. 6d. per lb. net, as to holder.

SARSAPARILLA.—Both grey Jamaica and Lima-Jamaica are scarce and wanted; there are second-hand sellers of the latter at 1s. per lb. Consequently there has been rather more doing in Native Jamaica, which is selling at from 9d. to 1s. as to quality.

SCAMMONY-ROOT.—Mexican, testing 15 per cent., is offered on the spot at 38s. per cwt. ex wharf.

TURPENTINE OIL shows a steady advance, amounting to 2s. 6d. per cwt. since last week, and closed on Wednesday at 62s. 6d. for spot American.

WAX, PARAFFIN, of B.P. quality (130-35 m.p.), is quoted 2½d. per lb. in 2-cwt. cases, ex-warehouse, London.

WOOD OIL is about 3s. per cwt. dearer, business having been done in Hankow description at 35s. spot, and to arrive at 34s. 3d. per cwt. c.i.f.

American Peppermint Oil.

Mr. F. M. Rudd, of Bronson, Michigan, writes to his agents, Messrs. R. W. Greeff & Co., regarding Wayne County peppermint oil as follows: "We learn from very authentic sources that the total production of peppermint oil in Wayne County, New York, last year was less than 700 lb., and that the production of peppermint in that district is practically a thing of the past. When Wayne County oil is offered in competition, it may be safely assumed that it is Michigan oil being sold as 'Wayne County,' and we think it is time that the illusion which still prevails in the minds of so many buyers on this side—viz., that peppermint grown in Wayne County, New York, is still a reality—should be dispelled."

Manchester Chemical-market.

February 14.

Heavy chemicals and miscellaneous goods are in request generally, and prices continue to be well maintained. Bleaching-powder again rules in buyers' favour, and for prompt delivery is quoted at 5l.; and for forward 4l. 2s. 6d. to 4l. 7s. 6d. per ton softwood casks on rails. Caustic soda, 76 to 77 per cent., 10l. 7s. 6d.; 70 to 72 per cent., 9l. 12s. 6d.; 60 to 62 per cent., 8l. 12s. 6d. per ton. Bicarbonate of soda, 4l. 7s. 6d.; industrial, 3l. 17s. 6d.; and tinted, 3l. 7s. 6d. f.o.r. Soda crystals, 50s. to 52s. 6d. per ton in bags. Ammonia alkali, 58 per cent., 4l. 2s. 6d. to 4l. 7s. 6d. per ton, all free on rails at works. Potashes are quiet, and stocks are in small compass. Carbonate of potash is steady, but yellow prussiate is quiet at about 4½d. to 4¾d. per lb.; foreign alum is being sold freely at 5l. 10s. for loose lump; 5l. 12s. 6d. for lump in tierces and 6l. per ton ground, in bags, on rails. Epsom salts unchanged at 60s. per ton bags; and 65s. to 80s. per ton casks and barrels (export). A better tone prevails in cream of tartar and acids generally. Rectified sulphuric acid, 160° to 190° Tw., 4l. to 4l. 2s. 6d. per ton makers' works. Sulphate of copper is a shade steadier at 20l. per ton for best brands, delivered Manchester. White powdered arsenic is quiet at 10l. 15s. per ton, delivered here. In coal-tar products the higher prices for carbolic acid and benzols are well maintained. Sulphate of ammonia is very firm at 13l. 8s. 9d. to 13l. 10s. per ton on rails Manchester.

Heavy Chemicals.

The condition of affairs in the heavy-chemical market calls for little special comment. A good all-round business is being

transacted, and the aggregate volume most probably shows an increase. There is a general steadiness in values both for main and miscellaneous products.

SULPHATE OF AMMONIA continues a very firm market, and in some cases quotations show an advance. There is a good demand, particularly for Japan and the United States. Present nearest figures: Beekton, 25 per cent. ammonia guaranteed, prompt, 13l. 7s. 6d.; London terms, 13l. 2s. 6d.; Leith, 13l. 15s.; Hull, 13l. 15s.; and Liverpool, 13l. 15s. Very little is being done on forward account.

BARIUM PRODUCTS continue in good average request, and prices remain on the steady side and mostly unaltered. Blanc fixe, pure precipitated sulphate of barium in paste form, 6l. 10s. to 7l. per ton, in usual 8-9 cwt. casks. Mineral sulphate of barytes varies from 35s. to 90s. per ton, according to quality, quantity, and package. Chloride of barium, best ordinary refined coarse or fine crystals, are a trifle lower at 6l. 10s. to 6l. 17s. 6d. per ton. Precipitated carbonate of barium, 5l. 17s. 6d. to 6l. 7s. 6d. per ton in bags. Hydrate of barium, purest crystals, 13l. to 14l. per ton in 6-7 cwt. casks. Hydrate of barium, fused concentrated, 56 to 60 per cent. BaO, solid, in 6-7 cwt. drums, 13l. 15s. to 14l. per ton, and similar quality, in crushed state and in special drums, about 3 cwt. each, 30s. per ton extra. Crude calcined barium sulphide, 70 to 75 per cent. BaS, 5l. to 5l. 10s. per ton in usual casks.

American Drug-market.

New York, February 7.

Business in the New York drug-market continues of satisfactory proportions, although the development of buying-inquiry falls short of earlier expectations. Owing to improved demand on spot and scarcity of supplies at primary sources several articles have scored advances. Opium, peppermint oil, sassafras, and mercurials are higher; jalap, damiana, and ipecac. are lower.

ALOES.—Case Curaçao is in fairly good demand, and prices are the turn firmer at 7c. for manufacturing supplies. Gourds are neglected at 10c. A small lot of genuine Barbados is held for 75c.

BUCHU.—Short leaves are higher at \$1.10 as the result of bullish advices from primary sources. Buyers are conservative in their dealings, however, awaiting reliable crop news.

CAMPOR.—Refined is 1c. higher on the basis of 43c. for bulk in barrels, due to the firmer markets abroad for crude and an increased domestic inquiry for celluloid-manufacturing, which absorbs the bulk of the supply.

CANADA BALSAM is easy at \$4.35, with much competition for the small business passing.

CASCARA SAGRADA continues firm at primary sources, where the supplies are said to be in the hands of a few strong dealers. Few transactions of an important nature have transpired on spot during the interval, local buyers as a rule holding aloof from the market pending the tardy development of consuming inquiry. Spot prices may be repeated at 7½c. to 8½c. as to age and quantity.

COPAIBA is in pretty good demand, and with some falling-off in receipts prices are firmer at 39c. to 40c. for C. and S. American. Para is also firmer at 50c. for round lots.

HYDRASTIS.—Demand is less keen, but prices are firmly maintained at \$2.75 for U.S.P. grades. The drug is very scarce in both spot and primary markets, and since the spring gathering of lower-priced rhizome is somewhat unprofitable, the stringency will not likely be relieved before the fall digging.

IPECACUANHA.—Quotations for Cartagena have been reduced 10c. to \$1.90 owing to a lesser demand. Rio is firmly held for \$2.20, but there is little inquiry.

JALAP is lower at 22c., and the market is rather dull owing to the expected arrival of new supply. Reports from Mexican sources indicate the formation of a close ring to control prices by limiting the output of the new crop, which is said to be plentiful and of high quality.

OPIUM has scored a series of advances totalling 55c., and the market is firm at \$5.25 for cases. Codeine has been marked up 25c. to \$4 for alkaloid. Morphine is unchanged. so far, but higher prices are expected.

PEPPERMINT OIL is again higher at \$2.75, corresponding to an advance of 40c. during the month, with still higher prices in prospect. The position at primary sources has been very firm for several months, most of the new oil having passed out of first-hands and the balance held in close control. Spot dealers have been following a conservative policy, but on the development of an active demand and reports of damage to the peppermint by frosts, attempts were made to replenish their stocks at former prices, and a further strengthening of values resulted.



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Telephone No.: BANK 852 (two lines).

INFORMATION WANTED.

We would be obliged if any reader would inform us by post-card or telephone who are the makers or agents of the articles mentioned in the following inquiries received since our last issue:

- 199/10. "Aura" nail-polish.
- 203/26. "Bayonal": supply.
- 198/524. "Wottel" perfume.
- 199/28. "Pheralion": makers.
- 205/13. "Corona" for catarrh.
- 198/520. "Olympia" suspenders.
- 200/600. Beechnut oil: suppliers.
- 198/523. "Acne" feeding-bottles.
- 198/522. "Tressina" (linctus, pills).
- 204/64. "Hyperthermine": makers.
- 200/6. Perilla oil: wholesale supply.
- 198/52. "Stingaree Oil Embrocation."
- 203/31. "Cimido" extractor: suppliers.
- 198/521. "Hermon" mouth-wash tablets.
- 201/70. "Ever Clean" feeders: makers.
- 205/130. Hopfen's patent hair-brush cleaner.
- 198/3. Makers of "Beall's Crude Carbolic Acid."
- 204/23. Sylvia's tablets and tube for hemorrhoids.
- 198/38. Machinery for moulding naphthaline balls.
- 197/22. Pulp paper or papier-mâché tubes for hygroscopic chemicals.
- 202/17. Glass tubes with nickel slip-on tops (different sizes): makers.
- 202/62. French maker of steel punches for stamping names on tooth-brushes, hair-brushes, etc.

INFORMATION SUPPLIED.

During the past week we have answered inquiries regarding the following articles. The information will be repeated to any other inquirers who send to the Department a stamped and addressed envelope for the purpose.

- "Adalin": makers (201/69).
- Antiseptic shaving-blocks: makers (195/35).
- "Arnold" vibrator: makers (195/32).
- Automatic slot-machine for postage stamps: makers (200/8).
- "Autotherm" flask: makers (196/74).
- Black tracing-cloth (for court plaster): makers (195/22).
- Blue pencils for writing on glass: suppliers (203/4).
- Boxwood pill-coaters with handle: suppliers (203/4).
- Calvert's pig-powders: proprietor and suppliers (201/21).
- Cards and elastic for carding goods: suppliers (193/72).
- Chamberlain's cough-remedy: suppliers in London (197/20).
- China pots with celluloid tops: supply (196/54).
- Collapsible tubes: makers (194/47).
- Contrexéville tablets (200/46).
- Cyclostyle: address of makers (200/8).
- Dispensing-twine: first-hand supplies (195/32).
- Elastene: makers (194/37).
- "Eurolos": maker (202/16).
- Foot's balm: proprietors (198/520).
- Garnier's perfumery (Nice): maker (160/4).
- Glover's G.B. skin and court plaster: suppliers (196/73).
- Heftband: makers (201/58).
- "Holadin": makers (200/44).
- Hypodermic syringes: first-hand dealers (199/5).
- Jenner's glycerin and cucumber: makers (194/20).
- "Pertussin": makers and agents (192/71).
- "Pinax": makers (187/26).
- Poro plastic felt: makers (185/2).
- "Prunol" proprietors and London agents (189/67).
- Pyonex oil: maker (193/9).
- Rose lozenges for influenza: makers (189/67).
- Schimmelbusch sterilisers: supply (186/26).
- Scott's Pills: makers (186/34).
- Seboria soap: makers (189/17).
- Sempules: makers (194/8).
- Sharratt's Compact Fumigators: makers (185/45).
- Sinapine Tissue: makers (185/32).
- Spirosal: makers (187/25).
- Starch, "B and P." brand: makers (190/52).

"Sulphume" and "Sulphume" preparations: makers (179/25).

Swansdown (by the piece): supply (188/58).

Tablet triturate machinery: makers and agents (186/66).

"Tanura" hair dye: proprietor (186/143).

Thymotussin: makers (185/59).

Royal Warrant Holders.

The following list of tradesmen who hold Warrants of Appointment to His Majesty King George V. is published in the "London Gazette," February 14:

From the Keeper of the Privy Purse.

Atkinson, J. & E., Ltd., perfumers, London.

Floris, J., perfumer, London.

From the Lord Steward.

Apollinaris Co., Ltd., natural mineral-waters, London.

Burgoyne, P. B., & Co., Australian wines, London.

Cantrell & Cochrane, Ltd., mineral-waters, Dublin.

Cerebos, Ltd., table-salt, Greatham.

Colman, J. & J., Ltd., starch and mustard, Norwich.

Cooper & Nephews, W., sheep-dip, Berkhamsted.

Duncan, Flockhart & Co., mineral-waters, Edinburgh.

Ellis, R., & Sons, Ltd., mineral-waters, Ruthin, N. Wales.

Fry, J. S., & Sons, Ltd., chocolate and cocoa, Bristol.

Goodall, Backhouse & Co., sauces and pickles, Leeds.

Hooper, Struve & Co., Ltd., mineral-waters, London.

Idris & Co., Ltd., mineral-waters, London.

Jewsbury & Brown, mineral-waters, Manchester.

Liebig's Extract of Meat Co., Ltd., extract of meat, London.

Pettifer, Stephen, & Sons, veterinary chemists, Malmesbury.

Riddle, Alex., & Co., Ltd., Stower's lime-juice cordial, London.

Schwepes, Ltd., mineral-waters, London.

Scrubb & Co., Ltd., Scrubb's ammonia, London.

Thorley, Joseph, Ltd., cattle-food, London.

From the Lord Chamberlain.

Borax Co., The Patent, Ltd., patent-borax manufacturers, London.

Buddles, William, chemist, London.

Corbyn, Stacey & Co., Ltd., chemists, London.

Crosfield & Sons, Joseph, Ltd., soap-manufacturers, London.

Davidson & Kay, chemists, Aberdeen.

De Castro & Wilson, chemists, London.

Evans, John, chemist, Dublin.

Farina, Johann Maria, perfumer, Cologne.

Hewett & Sons, chemists, Brighton.

Lever Bros., Ltd., soap-makers, London.

Metcalf & Son, chemists, Hull.

Norton & Co., chemists, Cairo.

Pears, A. & F., Ltd., soap-manufacturers, London.

Pope, Roach & Son, chemists, London.

Savory & Moore, Ltd., chemists, London.

Scott, Thomson & Co., Ltd., chemists, Calcutta.

Smith, Stanistreet & Co., chemists, Calcutta.

Squire & Sons, chemists and druggists upon the Establishment in Ordinary, London.

Tytler, William W., chemist, Ballater.

Vinolia Co., Ltd., soap-manufacturers, London.

Wood, R., purveyor of drugs, Windsor.

From the Department of the Master of the Horse.

Day, Son & Hewitt, cattle-medicine manufacturers, London.

Day & Sons, Crewe, Ltd., cattle-medicine manufacturers, Crewe.

Jeyes' Sanitary Compounds Co., Ltd., manufacturers of disinfectants, London.

The following have authority to style themselves "By Appointment to the late King Edward VII.":

Allen & Neale, chemists, King's Lynn.

Baungartner, Mrs., perfumer, Marienbad.

Bayley & Co., perfumers, London.

Bourjeaud, Philip, surgical-bandage maker, London.

Brand & Co., Ltd., meat-essence, London.

Court, Bruno, perfume-manufacturer, Grasse.

Elliott Bros., opticians, London.

Row & Son, chemists, Ruthin.

Rudiger, Dr. Adolf, apothecary, Homburg.

Squire, Frank R., chemist, San Remo.

Whitfield & Son, chemists, Scarborough.

The following are authorised to style themselves "By Appointment to the late Queen Victoria":

Beken, A. E., chemist and druggist, Cowes, Isle of Wight.

Clay & Abraham, chemists, Liverpool.

Ferris & Co., chemists and druggists, Bristol.

Frazer & Green, Ltd., chemists, Glasgow.

Hopwood & Son, chemists, Richmond, Surrey.

Sprules, Sarah, lavender essence, Wallington, Surrey.

OBSERVATIONS & REFLECTIONS.

By Xrayser II.

The Curriculum.

Mr. Ashton's letter on this subject is an interesting, but, I am afraid, not a very practical contribution to the discussion of the subject. His statement of the object of the scheme may be accepted, and in recommending it emphasis is put upon the right point. It will be admitted by everybody that if the curriculum were likely to effect all that Mr. Ashton hopes from it we should do well to adopt it at once. But I have two criticisms to make, one of which is suggested by the terms in which Mr. Ashton refers to the *status quo*. He talks of "stamping out the army of unqualified traders." The metaphor is a little mixed, and mixed metaphors usually betray some confusion of thought. Is it so in this case? Has Mr. Ashton reflected upon the difficulty of stamping out an army? We may possibly stamp out a fire when it has not got too great a hold (not otherwise), but an army is another matter. I do not quarrel with Mr. Ashton's term for the unqualified men by whom we are confronted; "army" may do very well, but in that case it is too late to think of stamping them out; they are too numerous, too active, they are already in possession of too large a field. A curriculum might stop the desertion to their ranks of

Men Who Have Failed

to pass the Minor, but for one who joins them now from that cause a dozen would then do so without having ever intended to qualify as pharmacists, for they have shown that they have not only a "right to get a living" (which surely required no showing) but the ability to do it; and the curriculum would make more formidable than ever the barrier which diverts men from the better course. To think that shifting this barrier from the end to the beginning of the course would deprive it of its terrors is futile. The other objection to Mr. Ashton's case is that it demands too much of the existing pharmacist. His suggestion with regard to apprenticeship is a beautiful dream. One motive for taking apprentices always has been, and, while human nature continues what it is, always will be, the obtaining of cheap labour, and there is no ethical reason why it should not be so. No premium a pharmacist is likely to get would compensate him for training an apprentice as Mr. Ashton proposes, and why should we be expected to educate young men without adequate recompense? If apprenticeship is to continue, it must continue as a "business proposition" on both sides; I greatly doubt whether anybody could make good business of such a "divided duty" as Mr. Ashton would impose upon us. I hope it will not be supposed that I am defending the present laxity with regard to apprentices; but it is too much to ask that in addition to such teaching as the routine of the shop gives occasion for, we should keep a separate school of pharmacy.

Local Centres

are the latest development of the curriculum-divided-written-examination scheme. The men of Manchester—or is it only Bolton?—have made up their minds on this point, and we all know that what Manchester says to-day all England thinks to-morrow. We may therefore look forward to the return of the dear old "Preliminary" days, when the youths from the Midlands hied to Birmingham, the Lancastrians to Manchester or Liverpool, the Tykes to Leeds or Sheffield, the Aberdonians to the Granite City, and so on *ad lib*. Between the new suggestions for amendment that are pouring in and the nihilism of the men

of Notts and elsewhere, it is clear that the curriculum is in for a hot time. There are a few educational enthusiasts who seem to have jumped into the fray for the love of "the cause," but if a referendum were submitted to the chemists in the country, I think that the Notts resolution would have a highly respectable following. It is not that they love education less, but that they love pharmacy more, for they believe that the adoption of the curriculum means the extinction of the qualified man by the inevitable growth of the unqualified trader. And so they would very much rather bear the ills they have than fly to others that they wot not of.

The Intrusion of Æsculapius

among the disciples of Galen gave variety and piquancy to a meeting that would otherwise have been deadly dull. The remarks of Dr. W. E. Dixon on the subject of "The Codex and the Medical Profession" appear to have been so perfunctory or so commonplace that you did not think them worth reporting. I am not surprised that Dr. Dixon claims for the Codex that it vouches for the therapeutic usefulness of the preparations mentioned in it, but it would be interesting to know how many disciples of Æsculapius acknowledge the validity of these claims. Mr. Gerrard truly told the meeting that medical men rely on the "Extra Pharmacopœia" and "Squire's Companion." Why? Simply because when they open these books they not only find ample information about therapeutics, but that information is backed up by references to clinical reports which they can read up if they wish to do so. In the Codex there is nothing of this kind, simply a bald, anonymous statement unsupported by the slightest clinical reference. If Dr. Dixon were a clinician his dicta might have great weight; but the average medical man wants more experience of the usefulness of drugs than is obtained by testing them in a pharmacological laboratory. The therapeutics of the Codex are of that nature, and the few medical men who have seen the book treat it accordingly.

The Repetition of Prescriptions

involves a question which cannot be decided by any hard-and-fast rule of universal application. It need hardly be said that whenever, and so long as, a medical man is in actual attendance on a patient he ought to have entire control of the case, and nothing should be supplied without his sanction. With regard to medicines liable to continued misuse, such as opiates and stimulants, the rule is not quite so clear. The doctor is not responsible for a patient no longer in his hands; he prescribed the medicine when there was occasion for it; if it is repeated without his knowledge when there is none, he is not to blame; the patient could easily procure its equivalent in another form. As for the pharmacist, it seems to me that he can only be blamed as he would be for supplying opiates indiscriminately in any form; the fact that he is repeating a prescription does not affect the ethics of the case, unless he has reason to suppose that his customer is ignorant of the nature of the medicine. No doubt there are circumstances in which he ought to consider the original prescriber's relation to the matter, and possibly to decline to dispense the prescription without his knowledge; but this is a contingency that does not, I think, often occur. In the great majority of cases in which "repeats" are asked for without reference to the prescriber there is no obvious reason for refusing to supply them. In the case of chronic disease, for instance, or of the recurrence of some slight ailment which has on a previous occasion been relieved by its means, it is difficult to see why the medicine should not be re-supplied. That a prescription given in exchange for a fee is not the property of the purchaser is an absurd contention, and if he afterwards uses it to his own hurt he has nobody to blame but himself.

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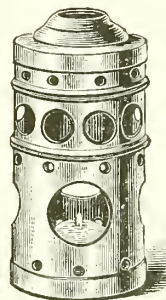
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LIQUORS

Editorial Articles.

The Minor Curriculum.

I. Past and Present.

It is now abundantly apparent, from the correspondence and discussions which have taken place in regard to the Pharmaceutical Council's draft scheme for the division of the Minor examination and the institution of a curriculum of study and training which all candidates for the examination must go through, that the retail drug-trade in Great Britain is not ripe for the latter provision. Nevertheless, responsible members of the Council have intimated that in the course of a few months the scheme will be approved by the Council and steps taken to give it the force of an Act of Parliament. Such statements were to be expected, for it is apparent that the Council has all along in this matter been living and acting in the ideal atmosphere of the past, without respect to the needs of the present. We propose to show that past ideals are not applicable to the retail drug-trade of the present because they have been realised, or have been deliberately shelved by the Society or by Parliament.

The Pharmaceutical Society of Great Britain was founded in 1841 "for the purpose (*inter alia*) of advancing chemistry and pharmacy, and promoting a uniform system of education of those who should practise the same." In furtherance of the latter principle the Society established a school of pharmacy in which education was provided for persons who desired to trade as pharmaceutical chemists. This title was conserved by statute in 1852 to those who pass the Major examination of the Society. Until 1868 chemists and druggists were not subject to examination, and when Parliament in 1865 appointed a Committee to examine two Bills, then before Parliament, dealing with the registration of chemists and druggists and the sale of poisons, the Committee reported that legislation on this subject should be confined to the sale and dispensing of poisons and the registration of persons qualified for that duty. The Committee went fully into the question as to whether the qualification and title of the Pharmacy Act, 1852, should be adopted for the new Act, and it expressly decided to the contrary, the Committee being of opinion that the higher education and examination of pharmaceutical chemists might be continued for the higher work in pharmacy, but that for the ordinary retail drug-trade the Minor examination would suffice. The Pharmaceutical Society acquiesced in that view by promoting the Bill which became the Pharmacy Act, 1868. Nevertheless, early in the 'seventies the old principle of a uniform system of education, which was solely intended for pharmaceutical chemists, began to be advocated for chemists and druggists only, and the Council of the Society appointed committees to follow up a manoeuvred agitation by advising a scheme of compulsory education. This was duly formulated, and after provision for it was made in a Parliamentary Bill, which did not pass, an attempt to enforce it by bye-law was defeated by the Privy Council in 1885. The present proposals are the penultimate stage of the efforts to realise the 1841 principle originated for pharmaceutical chemists, and now proposed solely for chemists

and druggists. This is done at a time when the qualifications of those who pursue pharmacy as a calling are eminently superior to what they were when pharmaceutical chemists alone held a statutory qualification, and even superior to that of pharmaceutical chemists, when the 1868 Act passed, and for some time thereafter.

The Pharmaceutical Council's action is consistent with the early aspirations of the Society, and for that reason is commended by some pharmacists for whose opinions we have the highest respect; but, we would again point out, the Society's objects were fundamentally changed by the 1868 Act, and it is both inconsistent with the Society's first principles and contrary to the 1868 objects that the practical nature of the qualifications of chemists and druggists should be changed to academic distinctions. That is a condition which should apply to pharmaceutical chemists only. We have repeatedly said that at the present time a compulsory curriculum of study for retail chemists and druggists is inexpedient, and this view has received a large measure of support from the trade. This is not surprising, because very marked changes have taken place during the past three decades, so that competition in the business is so keen that profits have been reduced very materially, and there has been a decrease rather than an increase in that part of the retail drug-trade work which calls for the higher skill and knowledge which at one time were the chief attributes of pharmaceutical chemists, but which, since the Minor examination has been increased in stringency, have been shared by those who are registered as chemists and druggists. The Society has been remarkably successful in assuring by examination that chemists and druggists are competent dispensers of physicians' prescriptions, but less and less of this work comes to chemists, and all experience goes to show that it will not come with still higher qualification. This is admitted.

A still more serious consideration is the general belief that if the curriculum is imposed it will increase the ranks of the unqualified. The condition of the retail drug-business is favourable for this, and the curriculum would accentuate the drift of the past decade or more. But the unqualified will not, we fear, be "unqualified" long. They are waiting for a suitable opportunity to place before Parliament a Bill to provide for a qualification which, in their opinion, is more consistent with the 1868 Act and more appropriate to the present condition of the retail drug-trade than a *cum curriculo* Minor examination would be. A measure of this kind will not become law without opposition, but the comparative ease with which the principles of the 1868 Act were abrogated in favour of the sale of agricultural and horticultural poisons is surely sufficient indication that the Pharmaceutical Society cannot rely upon the Government Departments to help them in opposing amendments to an Act which the Society is permitted to administer. Such a proposal may affect the Society injuriously, but chemists and druggists as a class would suffer most from it, and we consider it to be the first duty of the Society to conserve the interests of chemists and druggists by ensuring that nothing is done which will bring into being a legalised class of traders of a lower standard of qualification, but with equal rights as retailers. The Council of the Society has not shown that it has considered this aspect of the subject sufficiently well; it has been too intent upon realising the early ideal which is no longer applicable, and, in common with many in pharmacy and several of the local Associations, we should like the future of the trade and the influence of a curriculum upon it to be specially considered before the Council commits itself to that part of the draft scheme.

Cod-liver Oil Dearer.

ALTHOUGH it is yet too early to make any definite pronouncement with regard to the results obtainable from the Lofoten cod-fishing, the news so far has been very unfavourable, as will have been gathered from our Trade Report. As a rule the Lofoten fishing is supposed to commence by the end of January, and should now be in full swing; but this season there has been considerable delay (three weeks) owing to stormy weather, and the results up to date are extremely meagre. The official figures of the Government Bureau dealing with the catch and yield up to February 11, which were received in London on Monday, give the following results as compared with those of the previous year:

	Catch of Cod	Livers for Raw Oils	Yield of Cod-liver Oil
Lofoten ... (1910)	130,000	38	104
" ... (1909)	500,000	208	444
Whole of Norway (1910)	2,200,000	1,459	1,390
" (1909)	3,600,000	2,382	3,074

It will be seen from the above figures that the deficiency on the whole country to date, as compared with last year, is 1,674 hectolitres, or 1,473 barrels; but not much importance can be attached to these figures, as of course we are only at the beginning of the fishing. Another point to which attention may be called is that the liver yield of oil is less than that of last year, being from 38 to 40 per cent., as compared with 45 to 50 per cent. Information as to the condition of the livers varies: the general opinion appears to be that the cod are of good size and well conditioned, but that the liver is smaller and leaner than last year. The foregoing facts have given quite a "bullish" tone to the situation, and during the past few days considerable animation has been shown on the Norwegian market, with higher prices paid in several directions owing to continued stormy weather and meagre results. Several Norwegian holders, who have evidently taken a serious view of the situation, ask extraordinarily high prices, and on Monday 140s. per barrel c.i.f. London, without engagement, was quoted by cable for finest new Lofoten oil for March-April shipment—this representing an advance of from 22s. to 25s. per barrel on the previous week's prices. True, this quotation does not make the market price, but it reflects the feeling in Norway. However, the bulk of agents in London are unable to give firm quotations at the time of writing (Wednesday), as their principals are unwilling to sell in the present agitated state of the market, preferring to wait developments. Meanwhile second-hand holders who have stocks of 1910 oil are able to take advantage of the present situation, and the bulk of the business applies to such lots at between 115s. and 130s. per barrel, while in some instances holders prefer to wait events. It may be recalled that we commence the new season with a considerable stock of oil left over in Norway, but only a small proportion of this consists of Lofoten oil, in which there was a deficiency last year of 12,000 barrels at the close of the fishing as compared with the same date of 1909. Finmarken, on the other hand, proved a surprise last year, the yield being more abundant than that of any previous year—viz., 13,500 barrels, against 9,100 barrels in 1909; and this to a great extent saved the situation.

The object of the foregoing note is chiefly to call the attention of buyers to the fact that the market requires careful watching, and a close study of the figures relating

to the catch usually affords an indication of the trend of prices. It is too early in the season to express any opinion as to how the fishing at Lofoten will turn out and what amount of cod-liver oil will be produced. Fishing at Lofoten will continue up to Easter (which this year falls in the middle of April), and probably beyond if any quantity of fish is in the district. As a rule the maximum catches are in March. It may be remembered that in our issue of April 30, 1910 (p. 666), we published an article on the Norwegian cod-fisheries and climatic conditions, the gist of which was that a strong Gulf Stream, usually coupled with a high temperature, corresponds to a late and generally rather poor fishing; conversely, a weak flow of the Gulf Stream, which results in a low temperature, denotes an early and good season. These conclusions are based on observations by the International Hydrographical Investigations since 1901, and it will be interesting to see to what extent they are correct this year. The latest intelligence in regard to the market will be found in our Trade Report in this issue.

Coroners and Anæsthetics.

THE third part has been published of the second report of the Departmental Committee which was appointed to inquire into the law relating to coroners and coroners' inquests, and into the practice in coroners' courts. It contains summaries of replies to questions addressed to the coroners of England and Wales in respect of their jurisdiction, powers, and other matters. As to the requirement of viewing the body, a large majority of the coroners are in favour of allowing the coroner a discretion in the matter as regards both himself and the jury. A large majority also consider that a coroner before deciding to hold an inquest should have power to direct a *post-mortem* examination as a preliminary step. One hundred and sixty-nine coroners express the view that the present system of death certification is satisfactory and ninety-nine are of opinion that the system does not work well. The report includes in an appendix a number of suggestions adopted by the London County Council for the amendment of the law relating to death certification and coroners' inquests. The Council wants to equalise the work in Metropolitan districts and to appoint salaried coroners, who would not get other fees for this work. The British Medical Association, in a memorandum submitted to the committee, refers to the question of deaths under anæsthesia. This memorandum sets forth particulars of the action which has been taken by the Association since 1891 in regard to the effects of anæsthetics upon the human subject, the relative safety of various anæsthetics, and the best methods of administration. The Association has spent 1,450*l.* on its investigations. As to the qualifications of administrators of anæsthetics the Association submits the following dicta:

(1) It should not be permissible for any person, other than a registered medical practitioner or a registered dentist, to administer any anæsthetic for medical or surgical purposes.

(2) Registered dentists should be permitted to administer nitrous oxide and local dental anæsthetics, but no other anæsthetics.

(3) It is undesirable that any person should act both as operator and administrator in the same case, where this can be avoided, but it must be recognised that cases occur in practice, especially in sparsely populated districts, in which this responsibility must occasionally be undertaken.

(4) It should be left to the General Medical Council to secure, by the exercise of its control over the conditions of medical and dental qualification and registration, that every registered medical or dental practitioner receives such instruction as will qualify him for the administration of anæsthetics.

(5) The necessary prohibition of unqualified persons from the administration of anæsthetics would best be secured by proper amendments of the Medical and Dental Acts, securing the prohibition of unqualified practice generally.

The Association also considers that every death occurring under anæsthesia should be inquired into, but says that the coroner's inquest is not a suitable form of inquiry for this purpose, and suggests a medical officer under the general control of the Home Office. It is further of opinion that, if any public inquiry of a judicial character is to be held in cases involving special medico-legal questions, a High Court tribunal should be established, the *personnel* of which might be a judge of the High Court with two medical assessors. On the whole, the Association's recommendations are directed to the benefit and protection of medical practitioners in the first place, regard for the public well coming second, and other interests nowhere.

Veterinary Legislation.

ALTHOUGH the prospects of immediate legislation in the British Parliament for measures other than those introduced by the Government are not rosy, a Bill promoted by the Royal College of Veterinary Surgeons has been read a first time in the House of Commons. This Veterinary Surgeons Act (1881) Amendment Bill is mainly one of importance to members of the College and contains no proposals to narrow the present field of veterinary practice, unless the clause extending the personal offences of the present Act to companies can be classed under this head. The Bill consists of four clauses, the first being the title clause. The second aims at bringing within the influence of the College those persons who at the passing of the Veterinary Surgeons Act, 1881, were registered as in practice at the time. At present persons so registered are not subject to the jurisdiction of the Royal College of Veterinary Surgeons as are those who pass the College examinations. The consequence is that these unexamined veterinary practitioners may, and do often, advertise in a manner which is not in accordance with the professional views of the College. It is proposed that all persons registered as existing practitioners should be entitled to call themselves Veterinary Surgeons, but that they shall then become subject to the jurisdiction of the Royal College of Veterinary Surgeons in the same manner as are the members. For example, their names would then be liable to be removed from the Register for "conduct disgraceful in a professional respect" within the meaning of the 1881 Act. Clause 3 proposes to make all members of the College pay an annual fee of one guinea in January of each year. At present the members of the College do not pay anything beyond examination fees (5*l.* for each of the four examinations and 5*l.* registration-fee); but in practice these have not yielded sufficient revenue for the purposes of the College. Examinations have become more expensive to conduct and, besides, money is needed to conduct inquiries and prosecutions in cases of suspected infringement of the Act. Clause 3 has five sub-clauses which deal with the steps to be taken to recover unpaid fees and (in the Westminster County Court) to exempt members who do not practise in the United Kingdom, holders of the Highland and Agricultural Society's veterinary certificate who are or may be members of the College by virtue of the clauses of the supplemental charter of 1879, and Existing Practitioners. The last named are those who were registered as being in practice at the time of the passing of the 1881 Act, so that although they are entitled to call themselves Veterinary Surgeons they are not required to pay the membership fee, but will be subject to the professional jurisdiction of the College.

It is for these persons to say whether the *quid pro quo* that is offered is sufficient; but in regard to the members of the College, a referendum has brought out the fact that a large majority of members are in favour of the imposition of a membership fee. Clause 4 is as follows:

"Anything which would be an offence under the Veterinary Surgeons Act, if committed by an individual, shall be an offence if committed by a company."

At present there is nothing to prevent companies and limited partnerships of two persons from practising as veterinary surgeons, but although we understand the College has not had any trouble on this score up to the present, there are not wanting indications that unqualified persons are preparing to encroach upon the veterinary preserves under cover of company law.

Army Dispensers and Apothecaries' Assistants.

These gentlemen are becoming impatient about Section 4 (b) of the Poisons and Pharmacy Act, 1908, being put into operation. The question addressed to the Home Secretary by Captain Craig seems to have been on their behalf, and the Home Secretary gave somewhat cold comfort. Captain Craig is not the only member of Parliament who has been written to on the subject, and if the Section 4 (b) men had started out to play the Pharmaceutical Council's own game they could not have done more than they are doing to help the Council.

Are Doctors Unpopular.

The "Westminster Gazette" expressed surprise the other evening that a medical contemporary finds that there is a great deal of antagonism to medical practitioners. The idea seems to be that some medical men are rather keen about the "bawbees," but we do not think that medical men as a body are unpopular with the laity. In a recent article in "Chambers's Journal" Mr. Henry Leach has indulged in criticism of a class of medical practitioners which deserves attention. Mr. Leach refers to those who after getting their diploma or degrees never move a bit in professional knowledge, and become quite ignorant of new developments in the diagnosis and treatment of disease, with the result that it cannot be said that their patients get fair play. This criticism has perhaps given rise to the idea that doctors are unpopular, and while most chemists will be able to recall from their experience examples of the class of practitioners condemned by Mr. Leach, they would be the first to disclaim that this is a common characteristic of the medical profession. Mr. Leach suggests that the diplomas of medical practitioners should be endorsed periodically by some central authority appointed to ensure that the practitioners are up to date. The certificates of teachers in elementary schools are annually endorsed by the inspectors. It is this idea, apparently, that Mr. Leach appears to have in mind.

Druggists as Barristers.

During the past decade an unusual number of pharmacists have studied law and been called to the Bar in London and Dublin. It is not a modern predilection, for in the eighteenth century there was a druggist at the Bar—viz., Serjeant Davy, who was usually known as "Bull Davy" on account of his bullying manner in cross-examination. Several good anecdotes are told of Bull Davy. When in the drug-trade he became bankrupt, and the fact was not forgotten. Once on the Western Circuit he vigorously cross-examined an old countrywoman respecting a circumstance that had happened within her observation some years before. "And, pray, my good woman," said the Serjeant, "how is it that you should be so particular as to remember that this affair happened on a market-day?" "Why, sir," replied the woman, "by a very remarkable token—that all the cry of the city went that Mr. Davy, the druggist, had that morning shut up shop and run away." "I think, brother," said the Judge, "that you want no further proof of the witness's memory." It once fell to Davy's lot to search out the truth as to the responsibility of a proposed bail, so he thought it a fitting occasion for a display of his bullying pleasantries. "Sir," said the Serjeant, sternly, to the bail, "and pray, sir, how do you make out that you are worth 3,000l.?" The gentleman stated particulars of his property up to 2,940l. "That's

all very good," said the Serjeant, "but you want 60l. more to be worth 3,000l." "For that sum," replied the gentleman, by no means disconcerted, "I have a note of hand of one, Mr. Serjeant Davy, and I hope he will have the honesty soon to settle it." The Serjeant looked disconcerted, and Lord Mansfield observed, in his usual urbane tone, "Well, brother Davy, I think we may accept the bail."

The Progress of Perk.

Artist and Rhymer join to show how a pharmacist was evolved.

I.

How strange the Straws that by the Wind are blown
To point the Pathway of our Destiny—
Th' incipient trend that indicates to those
Who guard our youth that we perchance may rise
To heights unseen, but only vaguely dreamt,
In realms of Commerce, Art, or Poesy!
And yet how oft strong-marked parental traits
The treasured offspring very sadly lack!
Thus inoffensive, studious parent breeds
At times the raucous, book-deriding child;
Another, wedded to the plumber's art,
Evolves a dreamy, Shelley-Browning son;
While hardware-dealers, practical and staid,
Have e'en been known to have their life made glum
By boys who showed wild tendencies to seek
The mystic path of pharmacy. Alas!
E'en thus it was with Perk.



At Eventide,
As Parent Perk, in peaceful slippared ease,
Absorbed his special brand of Printed Word,
The innate yearnings of his Eldest Hope
Were manifest in beaker, bunsen, tube,
Wherewith was manufactured gaseousness
That might belike hide secrets yet unknown,
Yet bred disturbance to the calm serene
That erstwhile hovered o'er the Perkian home,
As when, in Schweppe container, two of H
And one of O coquetted with the flame.

Thus by such simple, but eruptive, act
Did Perk foredoom his destiny!

CAMPHORATED OIL found under a hedge at Barton by a three-year-old boy seriously endangered the life of the finder, who swallowed some of the contents. The bottle was of blue glass and distinctly labelled.

POISON SCHEDULE AND DISCOUNT CIRCLE.—We have prepared a card (5½ × 3½ in.), with eyelet for hanging up in Pharmacy or Store, showing the Poison Schedule, Part I. and Part II., on the front, and the Discount Circle which appeared in the Winter Issue (p. 153) on the back. Our publisher is selling the card at 2d. a copy, post free in the United Kingdom.

New German Pharmacopœia.

Oils and Fats.

Oleum Lini.—Still fluid at -16° (B.P. and L. & B. -20°), sp. gr. 0.930 to 0.940 (idem), iodine-value 168 to 176 (L. & B. 170 to 190), saponification-value 187 to 195 (L. & B. 187 to 195). On warming 10 grams of linseed oil with 15 grams of caustic-potash solution and 3 grams of alcohol, the resulting soap should be soluble without turbidity in water and in alcohol (mineral oils, resin oils).

Oleum Macidis.—Essential oil of nutmeg has an optical rotation at 20° of $+7^{\circ}$ to $+30^{\circ}$ (H. & U. $+13^{\circ}$ to $+30^{\circ}$), sp. gr. 0.870 to 0.930 (B.P. 0.870 to 0.910, H. & U. 0.870 to 0.920). Soluble 1 in 3 alcohol 90 per cent.

Oleum Menthae Pip.—"The essential oil obtained from the leaves and flowering-tops of *Mentha piperita*, L., or closely allied varieties of mentha." Optical rotation at 20° -25° to -30° (H. & U. -20° to -35°), sp. gr. 0.900 to 0.910 (B.P. and H. & U. 0.900 to 0.920). Soluble in 5 parts of alcohol 69 per cent.

Oleum Olivarum.—Sp. gr. 0.915 to 0.918 (L. & B. idem, B.P. 0.914 to 0.919), iodine-value 80 to 88 (L. & B. 79 to 87). The following test for the presence of cottonseed oil has been included: 5 c.c. of olive oil, 5 c.c. of amylic alcohol, and 5 c.c. of a 1-per-cent. solution of sulphur in carbon bisulphide are heated for fifteen minutes on the water-bath in a flask provided with a reflux cooler. On the further addition of 5 c.c. of the sulphur in carbon-bisulphide solution and warming for a quarter of an hour no red coloration of the mixture should occur. The presence of sesame oil is to be detected by the following test: 5 c.c. of olive oil, 10 c.c. of petroleum ether, and 2.5 c.c. of solution of stannous chloride are vigorously shaken in a test-tube. The latter is then held in water of 40° until the stannous-chloride solution separates, and then plunged in water of 80° in such a way that only the stannous-chloride layer is warmed; within three minutes no appreciable red coloration should occur.

Oleum Rosæ.—"The essential oil obtained from the fresh petals of different varieties of the rose." Optical rotation at 20° -1° to -3° (H. & U. -2° to -4°), sp. gr. at 30° 0.849 to 0.863 (B.P. 0.856 to 0.860, H. & U. 0.855 to 0.862). Crystals separate at between 18° and 20° .

Oleum Santali.—Contains at least 90 per cent. santalol. Distilled from the wood of the trunk and of the roots. Optical rotation at 20° -16° to -20° (B.P. and H. & U. same), sp. gr. 0.973 to 0.985 (H. & U. same, B.P. 0.975 to 0.980). The process for the determination of the santalol very closely resembles that proposed by Messrs. Hill and Umney as a general acetylation-process (*C. & D.*, February 12, 1910, p. 272): 5 grams of sandalwood oil, 5 grams of acetic anhydride, and 2 grams of anhydrous sodium acetate are heated to boiling for one hour under a reflux cooler. On cooling, 20 c.c. of water are added, and the mixture is heated on the water-bath for fifteen minutes, frequently shaking vigorously. The oil is removed from the aqueous fluid by means of a separator, and washed with water until the latter no longer reddens litmus; it is then dried with exsiccated sodium sulphate and filtered. To 1.5 gram of this oil is added 3 c.c. of alcohol and a few drops of phenolphthalein solution and, drop by drop, alcoholic seminormal KOH until a permanent red colour appears. Twenty c.c. of alcoholic seminormal KOH are now added, and the mixture heated on the water-bath under a reflux cooler. On cooling it is titrated with seminormal HCl, after addition of 1 c.c. of phenolphthalein solution, until colourless. To reach this point at the most 9.5 c.c. of acid should be required.

Oleum Sesami.—Sp. gr. 0.921 to 0.924, iodine-value 103 to 112, saponification-value 188 to 193.

Oleum Terebinthinæ.—Optical rotation is given as either $+15^{\circ}$ to -40° according to origin, sp. gr. 0.860 to 0.877.

Oleum Terebinthinæ rectificatum.—Obtained by distillation of a mixture of 1 part of the former product and 6 parts of solution of lime. Boiling-point 155° to 162° , sp. gr. 0.860 to 0.870. Its alcoholic solution should not reddens moistened litmus-paper.

Oleum Thymi.—Contains at least 20 per cent. thymol and carvacrol (H. & U. 25 per cent.), sp. gr. not under 0.900 (H. & U. 0.920 to 0.950).

Paraffinum Solidum is ceresin, prepared from ozokerite. Melting-point 68° to 72° .

Sebum Ovis.—The melting-point of sheep's suet is given as 45° to 50° (L. & B. same, B.P. 44.4° to 48.9°), iodine-value 33 to 42 (L. & B. 33 to 46), degree of acidity not over 5.

Vaselinum Album.—"A bleached mineral fat obtained from the residues of petroleum distillation." Melting-point 35° to 40° . On shaking 5 parts of white vaselin with 20 parts of hot water, the latter should remain colourless on the

addition of 2 drops of phenolphthalein solution, but should be coloured red on adding subsequently 0.1 c.c. of N/10 KOH (alkalis, acids). No precipitate should occur on adding an excess of hydrochloric acid to a mixture of 3 c.c. of caustic-soda solution, 20 c.c. of water, and 5 parts of white vaselin heated to boiling and then allowed to cool (saponifiable fats and resins). If equal parts of white vaselin and sulphuric acid are rubbed together in a capsule previously rinsed out with sulphuric acid, the mixture should, within half an hour at the most, become brownish, but not blackened (organic impurities). The same tests are enumerated for the yellow variety.

It is interesting to note that a large number of requirements adopted by the new German Pharmacopœia either correspond to or closely resemble many of the parallel proposals suggested by Messrs. Hill, Umney, Lucas, and Bird.

OUR GERMAN LETTER.

(Special Correspondence to the "C. & D.")

Alcohol Production.—A Frankfurt newspaper, in the course of a review of the alcohol-industry for the fiscal year which ended September 30, 1910, states that of "the 50,000,000 gals. of alcohol used for industrial purposes in 1909-10, 39,000,000 gals. was completely denatured—that is, used for lighting and heating—against 26,000,000 gals. in the previous season, an increase of 50 per cent. This alcohol is not taxed."

Pharmacy Inspectors in Prussia.—The Prussian Budget for 1911 provides for the transference of the State Medical and Hygiene Department from the control of the Ministry for Religion, Education, and Medicine to the Ministry of the Interior. Cliniques and chemical institutes of a scientific character will continue under the control of the Ministry for Education; but, except as regards University measures, this department of the Government has now no further connection with the pharmaceutical profession. A sum of m.9,000 (450*l.*) is provided in the budget of the Ministry for the Interior for a course of training for Government pharmacy inspectors. The sum voted for this purpose last year was only m.6,000, and the training classes were attended by thirty Government agents, while the total number of pharmacy inspectors for Prussia is about eighty.

The Compressed-tablet Difficulty threatens to become once more a burning question in consequence of a communication recently made at the annual meeting of the Berlin Apotheker Verein. The sick-clubs have made a complaint regarding the tablets of aceto-salicylic acid prepared by pharmacists, and state that in some cases too much base was added, and in others the tablets were too hard. It was therefore agreed that in future the pharmacists should only supply tablets of this substance manufactured by the Handels-gesellschaft Deutscher Apotheker or by Heyden's Chemical-works, and that the tablets should bear the manufacturer's stamp. This "degradation of the pharmacist to the rôle of a dealer in medicines" was strongly opposed by many of the members present, but the arrangement was defended by the board of the Society on the grounds that it had been proved that in many instances the tablets supplied were of inferior quality. At the same meeting the dispensing-charge for Salvarsan to members of sick-clubs was discussed. The preparation costs the pharmacist 6*s.*, and is to be sold for 10*s.* At first several pharmacists had charged less—viz., 9*s.*, 8*s.*, or even 7*s.* 6*d.*—and now it was agreed that each ampoule should be charged 9*s.*, but prescriptions calling for this preparation must first be stamped by an official of the member's sick-club. The question of properly taxing a solution of Salvarsan ready for use in private practice has been occupying the attention of several pharmacists, in view of the many manipulations required. The most exact calculation, based on the medicine-tariff, yields a total charge of 13*s.* 10*d.*, so that the manipulations required and the solvents, etc., used come to 3*s.* 10*d.*

A CLEAN TOOTH NEVER DECAYS, says a dental authority.

FOUR OUNCES OF BUTTER OF ANTIMONY failed to kill a Malton shepherd who attempted to poison himself with this fluid.

AT FOOTBALL on Saturday, February 4, the Westminster College eleven beat the South of England College eleven by three to one.

THE ALL-BRITISH SHOPPING WEEK was spoken of by Mr. J. Rymmer Young, of Warrington, rather contemptuously at a recent meeting. He asked whether the public would be invited to purchase all-British products whether better or worse than foreign goods, and when he got a reply in the affirmative, he characterised the scheme as "pettifogging nonsense and bunkum."

The Olive Oil Crop.

In the following article, written by a Marseilles correspondent, an interesting and valuable review of the market conditions and output of the principal producing countries is given. This period of the year (January-February) marks the winding-up of the various crops, a fact which adds interest to the article.

OWING to a total failure of the crop all descriptions of olive oil are now very dear, and prices are as high as they were at the beginning of the season 1909, which was a "record" year for prices. Most probably the short crop alone might not have brought about the recent substantial advance, but the bad crops of 1909 and 1910 have resulted in a general shortage of olive oils of all grades, and through the insufficient crops of 1911 this shortage has become more acute still. The present high prices are the natural sequence of the general shortage, and it may now confidently be said that prices will remain above those of 1910. As a matter of fact, the present shortage is most alarming to everybody concerned with the industry, and a review of the output in the various producing countries shows that the fears as to a bad year are fully justified. The following information has been carefully collected from those in close touch with the various markets, and is as accurate as it is possible to make it:

ALGERIA.—The crop is practically nil. This fact is in no way surprising, as it is a general rule that Algeria produces a crop every second year only. The year 1910 having been an average one, the season 1911 did not promise much, and the fact that we had no rain in the "Kabyles" from June 15 until November has made matters still worse. The imports from Algeria are consequently very small, 90 per cent. being of Lampante quality (for pharmaceutical and industrial uses), 10 per cent. being of secondary "edible" qualities. Lampante qualities are quoted at 120f. to 125f. (4s. to 4s. 2d. per gal.) c.i.f. Marseilles, unpacked; and "surfine" qualities from 180f. to 185f. (5s. 10d. to 6s. 2d. per gal.) same conditions.

CRETE.—The crop has failed, and the 8 per cent. industrial Candia olive oils will not be on the market this season.

GREECE.—In the Peloponnesus (Patras, Corinth, Calamatta, etc.) the crop is small, and estimated at about 3,000 tons, the greater part of which is of Lampante quality (for pharmaceutical and industrial uses). The manufacturing has only just commenced, and very little business has been done. Lampante olive oils are quoted at 130f. (4s. 3d. per gal.) c.i.f. Marseilles, and Calamatta "edibles" at 175f. to 180f. (5s. 9d. to 6s. per gal.), same conditions. In Corfu the crop has failed altogether, and as last year's stocks are practically sold out, Corfu qualities are not offered. The little business done in Lampante has been at 120f. to 125f. (3s. 10d. to 4s. 2d. per gal.) c.i.f. Marseilles, unpacked.

ITALY.—On the Riviera the crop has failed, and no "edibles" are quoted on the market. In the district of Florence (Lucca, Pisa, Sienna) the crop is estimated to be below 25 per cent. of an average. Good "edibles" are quoted at from 200f. to 210f. (6s. 7d. to 7s. per gal.), but no business has been done. In Sardinia, Calabria, and Sicily the crop is practically nil, and the oils manufactured are of a very bad quality, as the "worm" has done considerable havoc and caused the fall of the greater part of the fruit. The crop in the "Pulies" is reported to be below half an average, and on account of the "worm" qualities are much inferior to those of previous years. Good "edibles" are quoted at 195f. to 200f. (5s. 5d. to 6s. 7d. per gal.) f.o.b. Bari, unpacked.

SOUTH OF FRANCE.—In all olive-growing districts, comprising the départements Bouches du Rhône, Var, Alpes, Maritimes, and Drome, the crop is bad, and good first-choice "edibles" are very dear, ranging from 205f. to 220f. (6s. 9d. to 7s. 4d. per gal.) f.o.b. Marseilles, unpacked. Owing to these enormous prices business is very slack.

SPAIN, which produces, next to the South of France, the greater part of first-choice "edibles," has had a very bad crop. In the district of Tortosa the yield is practically nil. The greater portion of the olives have fallen, owing to excessive dryness, and the manufactured oils are therefore very inferior in quality. The prices range from 170f. to 175f. (5s. 7d. to 5s. 9d. per gal.) f.o.b. Tortosa, unpacked. In the district of Aragon the crop is nil, which means a great failure in first-choice "edibles." Fair stocks of the previous year's crop have been retained by speculators, and they realise very high prices, from 200f. to 220f. (6s. 7d. to 7s. 3d. per gal.) c.i.f. Marseilles, packed. The district of Borjas, producing, as a rule, very good average "edibles," has a small crop, estimated at about half of an average. The olives have suffered much through the "worm," and qualities are much

below the usual standard. Good "edibles" are quoted at 195f. to 200f. (5s. 5d. to 6s. 8d. per gal.), and surfine qualities at 180f. to 190f. (5s. 11d. to 6s. 3d. per gal.) c.i.f. Marseilles, packed. In Andalusia the crop is bad. At Malaga and Velez its yield is spoken of as one-quarter of an average; in the province of Jaen it is estimated at one-half of a good crop. Andalusian "edibles" are quoted at 160f. to 170f. (5s. 3d. to 5s. 7d. per gal.) c.i.f. Malaga.

TUNIS.—In the district of Sfax the manufacturing is finished. The crop is fair, and estimated to have yielded in all about 3,000 tons, the bulk of which was bought in December by native and foreign speculators, who are retaining the stocks. On this account business in Sfax oils is very slack. First-pressing good "edibles" are quoted at 190f. to 195f. (6s. 3d. to 6s. 5d. per gal.) c.i.f. Marseilles, unpacked; and second-pressing "edibles" at 180f. to 185f. (5s. 11d. to 6s. 2d. per gal.), same conditions. In the province of Sahel (Sousse, Monastir, Mahdia, etc.) the olives have suffered much through dryness, and the crop has practically failed. Estimates speak of 500 tons of Lampante and "edibles." The "worm," too, having done considerable damage to the olives, very inferior qualities only will be produced in the Sahel province. Business in good "edibles" has been done at 170f. to 175f. (5s. 7d. to 5s. 9d. per gal.), and in Lampante oils at about 130f. to 135f. (4s. 3d. to 4s. 5d. per gal.), goods to be taken at the mills unpacked.

TURKEY.—The crop in some districts is very good, but on the whole it is inferior to an average. The production in Turkey is estimated to yield in a good year about 70,000 tons—this year it will probably not exceed 30,000 tons. In the island of Mitylene one-third of an average is reported. The olive "fly" and the "worm" have done considerable damage, and consequently the qualities produced will only yield inferior Lampante oils. Smyrna has about one-third of an average of good Lampante and low-graded "edibles." In the districts of Adramyt and Ayvali the crop is good, and estimated at about 10,000 tons of good Lampante. "Edibles" of this origin are very scarce owing to the careless procedure of the natives in manufacturing. Levant oils have a very high degree of free fatty acids. Lampante Levant oils are quoted at 120f. to 123f. (5s. 11d. to 4s. 1d. per gal.) c.i.f. Marseilles, packed; and low-graded surfine "edibles" at 160f. to 170f. (5s. 3d. to 5s. 7d. per gal.), same conditions.

The foregoing being a summary report of the crops, we now refer to the Marseilles market in particular. There is a pronounced shortage in all qualities. In "edibles," France, Spain, and Italy have not produced much. In Lampante qualities for pharmaceutical purposes, Algeria and the Levant are much below previous years. The question, therefore, whether olive oils will keep at the present high level is of great interest to consumers, and the different opinions expressed on this subject in our market may furnish a reply on this important point. The season 1909, some people say, marks a precedent, and, as in 1909, olive oils cannot command the present high prices. The shrinkage in consumption, it is believed, will be also considerable, as the general public will not pay enormous retail prices but fall back on "seed" or other "table" oils instead.

Another argument put forward by many dealers is the following: The season 1909 cannot be compared with the present one. While in 1909 considerable stocks of the previous crops existed, this year's supply is entirely dependent on the yield of the present crop, which is undoubtedly very small. The consumption of good "edibles" is said to have increased during the past year, in spite of the exceptionally high prices, and considering the world-wide trade in olive oils, heavy demands may be expected which will probably be greater than the stocks; so that it is quite possible that olive oils will continue to be as firm as they are now. As a matter of fact, it is impossible to give a forecast. However, it is practically certain that if in July or August next prospects of the coming crop look bright, the market will naturally ease, as in this event speculators will be anxious to clear their stocks before the end of the season. Good "edibles," however, are scarce, and will probably keep firm through the whole of the season, and an eventual decline will most likely only affect second-class "edibles" and Lampante qualities.

FINED FOR CUTTING PRICES.—Shinnosuke Yamada, an Osaka patent-medicine vendor, was fined 50 yen at the local court quite recently for "cutting" prices below the rates allowed by the Osaka Guild of Patent-medicine Vendors. Not having paid the fine, Yamada was sued by the Guild to the Court, and finally forced to pay.

SOUTH AFRICAN NEWS.

"The Chemist and Druggist" is regularly supplied by order to all the members of the seven Societies and Associations of Chemists in British South Africa, as well as to other chemists in business there.

Cape of Good Hope.

BUCHU.—An official notice states that "All buchu or other forest produce, in transit in the forest conservancies, is liable to inspection by any forest or police officer, and to detention or seizure if necessary. To avoid unnecessary detention owners of buchu are requested to furnish their carriers with permits setting forth particulars as to ownership."

Natal.

EXAMINATIONS.—At the Final Pharmacy examination held in Maritzburg on January 12 two candidates were examined, both of whom failed to satisfy the examiners.

PERSONAL.—Mr. Simpson (of Burroughs Wellcome & Co.) was in Durban when the mail left. He reported that business in his line was fairly good.—Mr. E. G. Nichols (of Evans Sons Lescher & Webb, Ltd.) arrived in Durban on January 18 for a short stay.

BUSINESS CHANGE.—Mr. R. Ross, of Utrecht, will shortly open a new pharmacy in that town. The new building was commenced a couple of months ago, and will be a great improvement upon the old premises. Utrecht is a small farming town in Northern Natal.

TUBERCULOSIS SUPERINTENDENT.—The Durban Town Council selected Dr. Basil Adams, M.B., B.Ch., from twenty-two applicants for the new post of medical superintendent for tuberculosis. Dr. Adams was formerly house surgeon at St. Bartholomew's Hospital, London, and medical superintendent to the London Hospital for Diseases of the Chest.

DURBAN CHEMISTS' MEETING.—At the close of the meeting of the Natal Pharmaceutical Society (see below) the company resolved itself into a meeting of Durban chemists, with Mr. J. H. Read in the chair. Mr. Anderson introduced the subject of Saturday afternoon closing. He said that the chemists on the Berea Road side of the Berea had all agreed to close on Saturday from 1 to 6 p.m. The chemists on the Florida Road side had been closing on Saturday for some months past, and he thought that it was time the town chemists followed suit. After discussion, it was agreed that Messrs. Johnston and Gale be deputed to interview the town chemists with a view to closing from 2 to 6 p.m. Mr. Dunkerton brought up the subject of night attendance, but the matter was not proceeded with. The meeting then closed.

Orange Free State.

PERSONAL.—Mr. S. S. Hewitt, who has managed the business of Messrs. Heynes, Mathew & Co., Ltd., in Bloemfontein since August 1901, is leaving for the firm's head office at Cape Town.

THE QUARREL between General Hertzog and the O.F.S. Medical and Pharmacy Council (see below) has, writes our Bloemfontein correspondent, assumed a political aspect. The two local papers of opposing political views have pelted each other with leading articles of a heated character dealing with the question. Whichever faction is in the right (and possibly both are), it cannot be denied that the time is particularly inopportune for the combined professions to be quarrelling with the Ministers from whom they have been hoping for so much in the way of medical and pharmaceutical legislation. The point on which the members of the Council are resigning is that General Smuts, Minister for the Interior, having done all he could or would do to effect a settlement, refused to place the papers and correspondence before the Governor-General, alleging that such an act would be unconstitutional.

O.F.S. PHARMACEUTICAL SOCIETY.—At the annual meeting held in Bloemfontein on January 10, with Mr S. S. Hewitt in the chair, the following Executive Committee was elected: *President*, Mr. S. Taylor; *Vice-President*, Mr. F. Carter; *Hon. Treasurer*, Mr. A. Y. Auld; *Hon.*

Secretary, Mr. J. Rawling; and Messrs. S. S. Hewitt, W. B. Jeffrey, J. Reid, and A. McMurray. A cordial welcome was extended to Mr. A. Lomax, a country visitor from Heilbron, while a hearty vote of thanks was accorded to Mr. S. S. Hewitt for his services as President during the past year. Touching reference was made to the sad death of Mr. P. Cowie, and the Secretary was instructed to write to Mr. Cowie's sister, expressing the sympathy of the members. Mr. Hewitt, the retiring President, in his address, made reference to the accomplishment of the Union and predicted a happy future for South Africa.

O.F.S. MEDICAL AND PHARMACY COUNCIL.—The quarrel between the Council and General Hertzog, Minister for Justice, culminated at the last Council-meeting on January 13, when a number of the medical members and the dentist announced their intention of resigning, these being Dr. Ward (President), Drs. Pratt-Yule, Swift, and Manning, and Mr. Redpath. The other two members present (Dr. Bidwell and Mr. S. S. Hewitt) took up the line that the Council had forced themselves into an impossible position by refusing to accept the instruction of General Smuts, their Ministerial chief, and that they should either let the matter drop or ask General Hertzog for an explanation of his statements. They also contended that those members who dissented from the Council's line of action should not resign. Mr. Hewitt added that he would be leaving the province for good in the course of a week or two, and that he would therefore be no longer interested in the matter. At the same meeting papers were laid on the table concerning a case at Frankfort where a native was fined 15*l.* for practising as a doctor without being registered. One application for examination as a chemist and druggist was received and accepted. The following examiners were appointed: Prescriptions, Drs. De Kock and Manning; Botany, Dr. Potts; Chemistry and Physics, Professor Rudge and Mr. Lyle; Materia Medica, Chemistry, and Pharmacy, Mr. Fowle and Mr. J. Rawling.

Transvaal.

MESSRS. WALKER, ROGERS, LTD., have established permanent offices and showrooms at 32 and 33 Sacke's Buildings, Johannesburg. Mr. W. E. Rogers, who has been in Johannesburg for a short stay, leaves next week for the Cape ports, and meanwhile Mr. A. Walker will look after the firm's interest in the Transvaal.

MALARIA-PREVENTION.—The Johannesburg Antimalarial Association has issued cards (Publication No. 4), with hanging loops, bearing instructions in English and Dutch on "How to Destroy Mosquitos." There are also illustrations of the young (or "wiggler") and adult mosquito. The campaign is one in which chemists can materially assist.

Natal Pharmaceutical Society.

THE MONTHLY MEETING of the above Society was held at the rooms of Mr. G. Stuart Jones, at Durban, on January 19. There were present Messrs. Read, Dunkerton, Anderson, Edwards, Johnston, Firth, Gale, and Goodbrand (Hon. Secretary). Mr. J. H. Read was elected to the chair, in the absence of the President and Vice-President, who were out of town. Mr. Dunkerton asked if it would not be an advantage to have a copy of the Medical and Pharmacy Bill as drafted by the Conference at Bloemfontein. The Secretary replied that the Bill as drafted was in a sense private, and that the Government did not intend to use it, but would draft a Bill of its own. After discussion, the matter was allowed to stand over, especially as the members of the Pharmacy Board had promised to use their best endeavours to obtain a copy of the Government draft Bill before it is placed before Parliament.

CORRESPONDENCE.—Letters were received from Sir David Hunter, M.P., and the Hon. Thos. Watt, M.P., in reply to the resolution passed at the last meeting *re* Cape Medicine and Stamp Act, which was sent to all the Natal members of Parliament. Sir David was sympathetic, and hoped that the Act would soon be removed, while Mr. Watt said that the Government had already expressed its intention of abolishing the tax.

The Pharmaceutical Society of Cape Colony wrote welcoming the action taken by the Northern District Chemists' Association and the co-operation of the Natal Society. The Pharmaceutical Society of the Transvaal sent a copy of the resolution, forwarded also to the N.D.C.A., in which they

express a wish to know precisely what steps to take in co-operation with the other Societies.

PROPOSED ADDITION TO THE RULES.—The Secretary gave notice of motion that the following be added to the rules after the necessary period of three months has elapsed:

"Every member of the Society who shall have paid his annual subscription will be entitled to receive a copy of **THE CHEMIST AND DRUGGIST** weekly for that year."

OTHER MATTERS.—Mr. Firth introduced the question of duty on alcohol. He did not think that the chemists in Natal should pay duty on alcohol, when spirit could be obtained duty free in the other Provinces. On the suggestion of Mr. Anderson, the Secretary was instructed to write to the other Societies for information on the subject.—Mr. Edwards much regretted his absence from last meeting, as it had been his intention to speak on the subject of his letter to the Hon. Secretary with regard to approaching the Durban Corporation for the use of a room for the Society. The subject will come up for discussion at the next meeting.—Mr. Anderson said there was nothing of importance transacted at the last meeting of the Natal Pharmacy Board. The Board had instituted proceedings against Steel, Murray & Co., of Maritzburg, on a charge of selling arsenic.

OUR AMERICAN LETTER.

(Special Correspondence to the "C. & D.")

The Riker and Hegeman Corporation in New York City is gradually increasing its number of stores. One was recently established in New Haven, Conn.; others have been opened throughout the State of New Jersey; one or two have been added to the group in Boston; and there is a rumour to the effect that plans are quietly being made to purchase fifteen or twenty existing shops in the city of Philadelphia. Thus far the company has about sixty-five stores.

Adulterated Drugs.—The National Government has recently charged J. L. Hopkins & Co., drug-importers, New York, with violations of the Food and Drugs Act. The offences were the inter-State shipment of a package of belladonna-root containing 50 per cent. of ground olive pits, a package of powdered henbane in which *Hyoscyamus muticus* was found, and a package of powdered cloves over one-third of which consisted of clove-stems. The defendants entered a plea of "technically guilty," and were fined \$400.

The Work of Revising the U.S.P. is progressing as fast as possible, but something of a stumbling-block has been met in the difficulty of agreeing upon what particular drugs and preparations shall be recognised in the book. The members of the sub-committee on "scope" are considerably divided in opinion, some of them favouring a "narrow" Pharmacopœia, and others believing that a book of standards ought to include almost everything for which there is a substantial demand among physicians. The committee, however, has agreed upon a number of substances, and these have been turned over to the various sub-committees for chemical and pharmaceutical work on them. At a recent meeting in Philadelphia, at the home of Professor Remington, it was resolved to request some of the Government experts to furnish the introductory chapters of the U.S.P., covering the methods for determining boiling-points, melting-points, solubilities, etc.

The Foster Anti-Narcotic Bill now before the National Congress, would put leading narcotic drugs and their preparations and derivatives on a revenue basis, and would compel manufacturers, wholesalers, and retailers to give bond, as well as to pay an annual tax of from \$1 to \$10. The Bill would also restrict sales entirely from one bonded dealer to another, would necessitate the affixing of revenue stamps to every narcotic-containing package, and would impose heavy penalties for violation of the statute. It would involve such an infinite amount of red tape and trouble that the whole drug-trade is up in arms against it. The sole purpose of the measure is to provide a record of all transactions in narcotics, so that the drugs may be traced when the violation of State and local laws and ordinances is suspected. Two or three hearings have been held by the Congressional Committee having charge of the Bill, and prominent representatives of the several branches of the trade have asked for amendments of one kind and another, but it is doubtful if the Bill can be put into proper shape during this short Session.

FROM ROMSEY.—"Shocts annell 1d. and sault and tartter 1d., 1d. Broacised poudr" is a puzzle presented to a Romsey chemist. The first one is cochineal.

Manchester Pharmaceutical Association.

A SPECIAL MEETING was held on Wednesday, February 8, at three o'clock, to discuss the draft scheme for the division of

THE MINOR EXAMINATION

and the institution of a curriculum of study. Mr. G. S. Woolley (President) was in the chair, and some twenty members assembled, including representatives from the Salford Association. Mr. J. Grier, M.Sc. (Secretary), opened the discussion by explaining carefully and thoroughly the details of the scheme. He considered that the examination as at present conducted entails very considerable physical and mental strain, and for that reason welcomed the proposal to divide the examination. He then criticised the curriculum and suggested the following rearrangement of the hours:

		Draft scheme.	Suggested
Botany lectures	50	50	
" practical	25	50	↓
Chemistry lectures (inorganic and organic)	100	100	↑
" practical	300	180	↓
Physics lectures (mechanics and heat)	25	20	↓
" practical	—	30	
	500	430	↑

He assumed that mechanics and heat are the portions of physics required for the Intermediate, as sound, light, magnetism, and electricity really pertain to the Major examination; but the draft scheme does not make this quite clear. He supported the suggestion, which is finding favour all over the country, of utilising the Board of Education's courses in these subjects and of accepting their certificate in the elementary or advanced stages, as the case may be, in lieu of the Society's Intermediate. The Final must be conducted by the Pharmaceutical Society. With regard to what is meant by "a teaching institution approved by the Council," he thought it would simplify matters if only places approved by the Board of Education were accepted by the Council for the teaching of pure science *plus* such public institutions as University colleges. He thought it was even more important that the subjects of the Intermediate should be systematically studied under approved conditions than that the final subjects should; indeed, he was rather inclined to favour a free hand as to study for the Final examination.

Dr. Bertram Prentice, Principal of the Royal Technical Institute, Salford, was the next speaker. He said that he was not only the son of a retail pharmacist [in Edinburgh], but had himself passed the old pharmaceutical Preliminary and was in a position to understand their requirements in the matter of training. He asked how many apprentices spend their period of apprenticeship to the best advantage and how many qualify at twenty-one as they ought? He cordially supported the principle of the scheme and saw no difficulty whatever in carrying it out in Salford, provided employers were willing to allow their apprentices or junior assistants three nights per week or three afternoons to attend the courses of instruction.

The attendances would be as follows:

First year.	Tu. 7 to 9.30.	Lecture followed by practical work in Stage 1 chemistry.
	W. 7 to 9.30.	Practical work in the laboratory.
	Th. 7 to 9.30.	Physics (mechanics and heat), lecture and practical work.
Second year.	M. 7 to 9.30.	Organic chemistry, Stage 1.
	W. 7 to 9.30.	Inorganic chemistry, Stage 2, non-metals.
	Fr. 7 to 9.30.	Botany, Stage 1.
Third year.	M. 7 to 9.30.	Organic chemistry, Stage 2.
	Th. 7 to 9.30.	Inorganic chemistry, Stage 2, metals.
	Tu. 7 to 9.30.	Botany, Stage 2, including microscopical work of a special or applied nature if desirable.

The session in each year extends from the last week in September to the end of April, seven months' duration, and it would be incumbent on the student to sit for the Board of Education's examination each year in each

subject so as to earn the grants. These conditions complied with, the fees would be 7s. 6d. for the first year's course, 7s. 6d. for the second year's course, and 10s. for the third year's course. Curiously enough, the lectures in chemistry for the three years' course amount to 150 and the practical work to 300 hours, the very number given in the draft scheme.

Mr. H. Stout (Salford) thought apprentices should pass the Preliminary before beginning apprenticeship. Mr. Pidd doubted if the Society had power over chemists in this matter. The President spoke of the hardship on apprentices in outlying districts, and was curious as to what would be accepted as approved places for science training in such cases. Mr. Flint and Mr. Simmons (Salford) also spoke; and after Mr. Grier had replied, the following resolution was moved by the President of the Manchester Association and seconded by the President of the Salford Association, and carried unanimously:

"That the draft scheme with division of the examination of the Pharmaceutical Society into Intermediate and Final is with certain modifications approved by this meeting."

The President, Secretary, and Mr. David Lewis as representing Salford, were appointed a sub-committee to draw up a report embodying the modifications of the scheme suggested for transmission to the Pharmaceutical Council. [The Salford Association has independently disapproved of the scheme.—EDITOR C. A. D.]

Stockholm Tar.

By Donald McEwan.

Abstract of a paper read before the Edinburgh Chemists', Assistants', and Apprentices' Association.

THE B.P. states under "Pix Liquida" that it is "a bituminous liquid, obtained from the wood of *Pinus sylvestris*, Linn., and other species of *Pinus* by destructive distillation. Known in commerce as Stockholm tar." A recent report of the Swedish Chamber of Commerce suggests reasons why this statement may require revision. Swedish exporters of this article have expressed a desire to substitute for this rather ancient trade-term a more modern and accurate one. Buyers in Great Britain and the Colonies insist on a guarantee that the Swedish wood tar they are buying is "genuine Stockholm tar." Some shippers decline to give such a guarantee, saying that at the present time there is no such tar in existence.

The history and origin of the term "Stockholm tar" is interesting. From 1648 to 1715 there existed in Sweden tar trading companies which had the exclusive right to purchase wood tar in Norrland (the northern part of Sweden) and Finland (then a Swedish province) and to export such goods. Stockholm was the chief port of shipment, and there a so-called Tar Court (Stockholm's Tjårhof) was established. The tar exported from Stockholm at that time, and to which the term Stockholm tar was applied, was not produced in the Stockholm district, but was brought from the northern part of Sweden and from Finland, where the tar was produced by peasants from dry wood stumps burned in "tjår-dalar" or specially made tar-burning grounds. On arrival at the Stockholm Tar Court all barrels were "wrecked" before being shipped abroad. The procedure of "wrecking" was as follows: After the barrel had been filled with tar it was left standing for some hours, when the water which had accumulated on the surface was drawn off and the barrel filled up with tar. The "wreckers," who were sworn servants of the Tjårhof, issued a certificate, which at that time was required for the export, stating that the barrels contained the regulation quantity and that the tar had been "wrecked."

The old Stockholm tar was shipped in barrels of 125 litres. Several tar-exporters in the north of Sweden still use barrels which have been examined by the State Comp-trollers as to their capacity, and if found to hold the right measure the barrel is stamped with three crowns. Many importers attach great importance to this mark, and erroneously look upon it as a quality mark. A variety of tars differing very much from one another is imported from Sweden. So-called Stockholm tar is generally shipped in three qualities or grades, viz.:

Fine thin (no grains or crystals).

Middle fine or *ordinary* (either gluey or thin and fine-grained).

Thick (very coarse-grained).

The name "Umea tar" is applied to similar tar burned in the Umea district and shipped from the port of Umea. This tar is delivered in "Swedish barrels" containing 27½ gals. and weighing 167 kilograms gross and 133 kilograms net. "Umea tar" is considered the very best in the market. "Skelleftea" and "Lulea" tar are of a similar quality. These three tars are sometimes also shipped as "Stockholm tar." Swedish "Factory tar" (produced as a by-product when burning charcoal) must not be confounded with "Stockholm" or "Umea" tar. It is easily distinguished by its colour and smell. The genuine tar is yellow-brown or light-brown in colour and with a turpentine smell, while the factory tar is of a dark-brown or black colour with a strong smoky smell. The tar manufactured by peasants and shipped from Finland (Wasa and Uleaborg) was formerly, and is sometimes now, called "Stockholm tar," but it is generally shipped as "Wasa tar."

Until comparatively recent years there was only two kinds of wood tar regularly exported to England—viz., Stockholm tar, exported from the Gulf of Bothnia, and Archangel tar, from Archangel. The latter was shipped in barrels containing about 112 litres. Then the so-called Russian tar, exported from Riga, Libau, and Königsberg, came on the market, and has largely taken the place of "Stockholm tar" owing to the scarcity and high price of the latter, and also because the Russian tar is obtainable at all times of the year.

Disputes between buyers and sellers as to the real meaning of "Stockholm tar" have arisen since the appearance of the cheap factory tars on the market, and British importers have suggested that the term "Stockholm tar" should be retained for the peasant-made article, as it has been used for centuries, and the "factory tar" termed "Swedish kiln wood tar." The Swedish exporters advise that buyers of tar should purchase from samples, and insist on a full description of the tar. They much prefer this to a guarantee to sell "genuine Stockholm tar." It is difficult to see what objection importers could have to this method of contracting sales.

With regard to the manufacture of "Stockholm tar," Theophrastus gives a description of the method carried on in his day (372 to 287 B.C.), which applies to the practice carried on by the Swedish peasants at the present time with considerable accuracy. The process is a wasteful one, as nothing but the tar and charcoal are recovered. The tar can be separated by fractional distillation into three principal fractions: (1) a watery portion containing pyroligneous acid, methyl alcohol or wood naphtha and acetone; (2) light oil of tar, which contains some of these substances and toluol, xylol, and other hydrocarbons of that series; and (3) heavy oil of tar, which contains phenols, creasol, and guaiacol. The re-distillation residue is ordinary black pitch.

It seems desirable that the B.P. description and characters and tests should be so revised as to exclude varieties of tar differing much from true Stockholm tar.

AUSTRALIAN TARIFF.—Supplement 20 of the Customs Tariff Guide contains particulars of the following tariff decisions made by the Department of Trade and Customs: Foot's bath-cabinets, 30 per cent.; catechu for use in beer-finishing and leather-dyeing, free; cocaine No. 1 (cocoa-butter substitute), 25 per cent.; metal-polish (tripoli and lard stearin) for use on machine-buffs, 15 per cent.; "Jesso-line" (Cyllin liquid soap), according to size of package; senna (1-oz. packets), 15 per cent.; somatose milk (albumose combined with tannic acid), free; flowers of sulphur (1-oz. packets), 15 per cent.; Helios flasks, 25 per cent.; fluxite (zinc oleate, zinc chloride, with unsaponified oil), 4s. per cwt. or 15 per cent.; horehound herb, 4d. per lb.; Way's pocket smelting outfit, 20 per cent.; "Duplex" oxygenator, 25 per cent.; grease-cleaning pads, 15 per cent.; "microlineum" (chiefly crude creosote oils), 2s. per gal.; grease-proof paper, 15 per cent.; stout-priming (sugars in part caramelised), 6s. per cwt.; crushed sesame seed, 4s. per cental.

CORNER FOR STUDENTS.

Conducted by Leonard Dobbin, Ph.D.

All communications for this section should be addressed thus: "Corner for Students, 'The Chemist and Druggist,' 42 Cannon Street, London, E.C."

QUALITATIVE ANALYSIS.

A Mixture of not more than three salts will form the subject of the next exercise in qualitative analysis. The mixture will comprise acids and inorganic bases occurring in the British Pharmacopœia, and is to be submitted to a thorough systematic examination, all its constituents are to be detected, and proof is to be given that the substances detected are the only constituents of the mixture.

Students' applications for portions of the mixture of salts (accompanied by a stamped and addressed envelope, not a stamp merely) will be received up to Tuesday, February 21, and the samples will be posted on the following day.

Students' reports will be received up to Saturday, March 4. Each report should contain a concise account of the work done, and should include a list of the constituents detected. In this list any substance regarded as an accidental impurity should be distinguished from the essential constituents of the salts composing the mixture.

The analysis announced above forms the fifth exercise in the analytical tournament for the current winter session. The usual monthly first and second prizes in this series of analyses will be awarded only to apprentices or assistants who are preparing for the Qualifying examination of the Pharmaceutical Society of Great Britain or of Ireland, which fact must be attested on their reports.

Dental Notes.

Why Teeth Decay.

DR. TURNER, in a paper printed in the "Gazette" of the Royal Dental Hospital of London, makes the following remarks on the causation of caries of the teeth:

"Apart from deformity, almost all mouth-disease is due to stagnation, and the author would distract the attention of practical men from heredity, sex, water, climate, and what not that is intangible and wonderful back to the root factor of dental caries—stagnation. Such points are interesting, but since all the attention which can be paid to them does not by one jot diminish dental caries, they are as yet unimportant. Stagnation attacks impartially all sexes, ages, and classes in the world where civilisation is established; among more primitive races its evidence diminishes, and the diminution is found to run parallel with the character of the food. All civilised races subsist largely on soft, sticky, starchy, and sugary foods, and here the incidence of caries is appalling; less civilised races, such as the hill tribes of North India, though living largely on cereals, yet when eaten coarsely ground, we get 75 per cent. drop in the incidence of caries. Passing to the pure flesh-eaters, such as the Gauchos of the Argentine plains, we find an absolute absence of caries. But pure flesh-eaters when living in the Argentine cities and feeding on soft breads become victims to dental caries. The evil of this carbohydrate-food stagnation lies in its fermentability. Eastern peoples feed largely, often solely, on rice, and yet may show little or no caries. The explanation lies in the way in which the rice is prepared. If well washed before boiling, the glutinous covering is washed away, and the grains lie distinct from each other and eat clean—i.e., their debris is readily washed away by saliva. If boiled unwashed, the result is a sticky mass fermentable with acid-production. The second point concerns the fermentability of sugars. Di- and polysaccharides cane-sugar, grape-sugar, milk-sugar, are less fermentable than mono-saccharides, since they must undergo a previous change into a mono-saccharide, as starch must. The simple sugars—glucose, dextrose, etc.—will ferment in a few hours. This explains why sugar-cane does not necessarily produce caries. The age incidence of caries is an important point. When a tooth erupts exposed to carbohydrate-germ stagnation, within six months it is very commonly a wreck. Caries, in fact, is practically as prevalent at three as at thirty, and the common factor is carbohydrate-germ stagnation—as common among the rich as among the poor, in one climate as in another, in soft or hard water areas, among the healthy or

debilitated, in sparsely as in populated districts. A broad survey of the human races as made by the late Mr. Mummery shows that those free from carbohydrate-germ stagnation are free from caries. The obvious points of stagnation—the pits and fissures, natural and pathological, of the crowns; the interstitial surfaces; the cervical edges, especially the buccocervical, where the tongue cannot reach—are the seats of caries, which frequently is symmetrical. The complex teeth—first permanent molars—are most frequently attacked; the least complex, the most immune. The teeth less accessible to cleansing, natural or artificial, are the victims of caries—a fact which finds expression in the idea that wisdom-teeth always come decayed."

Dr. Turner then points out that the same relationship between dental caries and stagnation exists in the lower animals. Except in a few cases of fungivorous monkeys the lower animals are exempt. Domesticated, however, they, sooner or later, began to show caries, according to the kind of food given them. The dog and cat in this respect being the most common pets, show caries very quickly, owing to the soft pulpy nature of the food given.

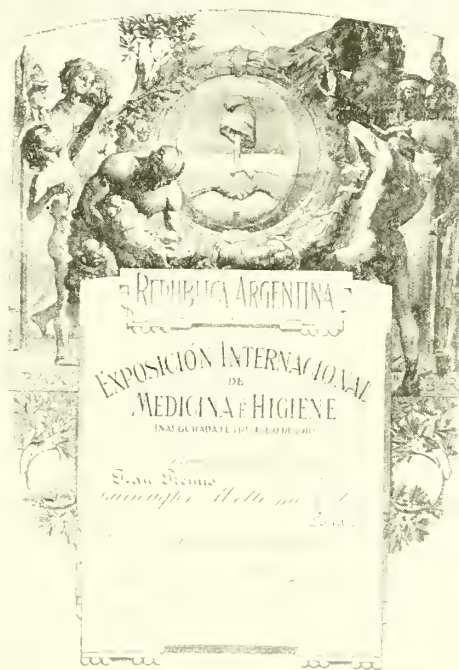
NEW BOOKS.

Any of these books printed in the United Kingdom can be supplied, at the published price, to "C. & D." subscribers on application (with remittance) to the Publisher, 42 Cannon Street, London, E.C. These notes do not exclude subsequent reviews.

Adam, Curt. *Handbook of Treatment for Diseases of the Eye*. Trans. from German by W. G. Sym and E. M. Lithgow. 7 $\frac{1}{2}$ ×4 $\frac{3}{4}$. Pp. 276. 10s. net. (Rebinan.)

Baskerville, C., and Curtman, L. J. *A Course in Qualitative Chemical Analysis*. 8vo. 6s. net. (Macmillan.)

Bocquillon-Limousin, H. *Formulaire des Médicaments Nouveaux pour 1911*. 6 $\frac{3}{4}$ ×4. Pp. 532 plus index and synonym list. 3fr. (Bailière, 19 Rue Hautefeuille, Paris.) [This year-book of new remedies is brought up to date by the inclusion of most of the medicaments introduced since the last edition was published. It includes such substances as "606," abanon, asiphyll, boroform, cotarine cholate, gras-trosan, hectine, kharsin, mercochinol, pantopon, tanargentane, tyramine, valisan, xaxaquinine, and zyncopyrine. There are altogether about 500 new remedies described in the book, which is a useful one for reference by dispensers. It is printed in French.]



Diploma for Grand Prize awarded to Messrs. Burroughs Wellcome & Co., Snow Hill, London, E.C., at the International Exhibition of Medicine and Hygiene held last year at Buenos Aires.



Memoranda for Correspondents.

All communications must be accompanied by the names and addresses of the writers, otherwise they cannot be dealt with. Queries by subscribers on dispensing, legal, and miscellaneous subjects connected with the business are replied to in these columns if they are considered to be of general interest. Letters submitted for publication (if suitable) should be written on one side of the paper only. Their publication in "The Chemist and Druggist" does not imply Editorial agreement with the opinions expressed.

Warning to London Wholesalers.

SIR,—Will you oblige us by informing the trade in London through your columns that a young man has called upon London drug-houses and sundry-houses representing himself to have been a former employé of ours and asking for money? We should like to warn them against being victimised by this man, who has positively no claim of any kind upon them or upon us.

Yours faithfully,

HAYES, CONYNGHAM & ROBINSON, LTD.,
T. W. ROBINSON, Managing Director.

Wine-licence Duties.

SIR,—Although it is years since I have taken any part in the questions interesting pharmacy, yet what I learn of the effect of the late Budget upon our business in doubling, trebling, or more, the wine-licence, so unfairly thrust upon us a few years ago, has stirred me up to write to the Chancellor of the Exchequer upon the danger of its creating a new class of wine-seller in the country, which I apprehend is the last thing that he desires. The protest to command attention asks for general support, and for this reason I shall be very glad if THE CHEMIST AND DRUGGIST will allow space for this note and for any correspondence that it may evoke. No chemist now selling wines generally is likely to wish for competitors to be multiplied, and others, I expect, will be more than content if the present duty were removed and they were allowed as of yore to sell *bona-fide* medicated wines free. If the Excise authorities, assisted by the Pharmaceutical Society, were to draw out a schedule of all medicated wines that pharmacists should sell, and permit them to be sold without any licence, the evil would be remedied and an unreasonable burden removed.

I am, very truly yours,

Plymouth, February 8.

ALFRED P. BALKWILL.

The Proposed Curriculum.

SIR,—I have observed with ever-growing interest the prolonged discussion in your columns on the proposed curriculum. It seems that many pharmacists think that pharmacy as an occupation should not be carried on for mere financial gain, but as a hobby or as a pleasant means of killing time. At any rate, that is the way some of the letters which have appeared in your paper have impressed me. A few months ago there was a long argument as to whether the Minor is really worth while. I think that those persons who thought it was not and a great number more will have their views greatly strengthened upon that subject now. Mr. Dott, and our friend "Xrayser II.," seem to have hit the right nail on the head. They think that a large majority that the real impediment to the qualification if the average man lies in the Preliminary examination. Mr. Dott's views about the advisability of an examination after the style of the old Preliminary being instituted in the place of the present one are, it seems, the only solution of the problem of the great unqualified. It would at once be a source of revenue to the Society and would increase the number of passes of desirable men. Six subjects (two of which are quite useless) are too many for any chap to work-up with any hope of success in conjunction with his every-day business duties. As "Xrayser II." said, some people think the present-day youth an indefatigable cramming-machine, and that they must cram, regardless of all the laws of health and nature. The proposed curriculum as it stands places the difficulty of qualifying as a pharmacist on a par with, if not above that of, a doctor or lawyer.

And what return does one get? For men who regard hard study as a pleasant pastime it makes pharmacy an ideal home, but to the would-be practical men a veritable Hades. To all appearances the curriculum will not increase but rather decrease the number of qualified; but, I suppose, as usual, the Society will remain obdurate and pass on its blameless way regardless of the advice of majorities.

Yours faithfully,

DISGUSTED. (195/26.)

SIR,—I have read and studied the various letters and theories propounded on the curriculum which have appeared in your valuable journal, but Mr. Ashton's makes me think that pharmacists must in future be philosophers. Imagine a busy pharmacist with a laboratory to teach his apprentice such useless stuff as the Minor student in expected to know! How many pharmacists are there in England or Scotland who would undertake this work, which would mean employing a senior assistant to attend the counter while the apprentice is instructed in the art of manipulating a test-tube or burette? I think Mr. Ashton would be the only one. Who are the parents that can afford to pay the fee a pharmacist would expect for their son's tuition? Registered pharmacists and registered pharmacies will become obsolete if the Pharmaceutical Society are not very careful. The man of the future is the expert salesman, whether he is a Minor man or not. Mr. Burrows, one of Boots' departmental managers, said at a recent dinner of the firm that "young men in the service find that there is something more in the world than the Minor qualification," and so there is. Why not have a thorough practical business and general knowledge examination for men who do not think "the Minor worth while"? Or, as I have advocated before in these columns, divide the drug-business, as in Ireland. Why should the four million odd people in Ireland have their two classes of chemists when the forty million people of England have only one? Of course the English drug-store proprietor of the present day is as well qualified as the R.D. of Ireland or perhaps as the magic Minor man. Why should the drug-store men not unite and demand recognition? I am not a drug-store proprietor.

Yours truly,

Birmingham.

PERPLEXED. (202/8.)

SIR,—I cannot agree with you that a curriculum is not needed. It is long overdue, but that is no reason why it should be highfalutin or impracticable. Most apprentices waste their time. "Xrayser II." says they all have a good time between sixteen and twenty. "Xrayser II." is right. Let us look at our complaint of inefficient assistants—due to what? Careless masters? I do not agree. Apprentices are allowed to grow up in the business, kept out of sight as much as possible, and the bigger the business the greater the sinner, because where a big business is being done and several men employed, there is no need and very little chance for an apprentice taking on important work. It is in the little businesses where no men are employed that apprentices get the most work to do; there is nobody else to do it. Why, then, do we now complain of men unequal to our need if it has been proved that the bulk of masters never did (even in the old days) do much in the way of teaching? Here's the answer:

1. Our craft has become a trade and altered completely in twenty-five years (though some may deny it even yet). Where we were once looked upon with awe (not for what we knew, but because our customers knew so little), we are now ordered about by customers who think they know it all. We must know more business ways of trading and know them earlier.

2. The public's knowledge of drugs has really increased, and we must know more of our craft and know it earlier.

3. Business is done at a greater rate, owing to the increase in population. The time needed (or taken) by the public in sport or recreation leaves less spare time to wait on our pleasure and convenience. We must be able to work quickly at a younger age than formerly.

Therefore we must teach, and to do that we must have a curriculum, and I feel sure you, Sir, will agree with me; but you, doubtless, in your greater knowledge of the methods of our Society in the past, think that to expect them to formulate a practical curriculum which will be applicable to every youth in every town or village in the

United Kingdom is a very tall order. But I have great hopes of the Society. They are certainly taking a reasonable course in asking Associations and teachers to make suggestions. No doubt we shall have later on special meetings of teachers and Association secretaries and the Council. I feel sure a really workable scheme will yet be produced, and to that end I seek to suggest amendments to the present one.

"Save me from my friends," the Society might have said any time and all the time these last twenty years. As Mr. Dott, of Edinburgh, says, "the doctrinaires" called aloud for a higher standard than ever, forgetting that we had not even a decent groundwork of proper apprenticeship to build upon. "Fearsome curricula" were evolved, as "Xrayser" used to say—the very word frightened us. Men who would curse both loud and deep in your private ear would not air their views in the trade journals for fear that some of the loud-voiced, high-standard men would reply, "He's not a chemist!" "He has a common, low-class trade," "What could you expect?" Therefore, the high-standard men seemed to have it all their own way. But a change has come over the spirit of their dreams. Let me quote "Xrayser": "Dream after dream succeeds, and still they dream that they shall still succeed." I well remember before the passing of the last Pharmacy Act how one member of Council said, "We must face the fact that we have to recognise companies once and for all," and the meeting thereupon squashed one or several of the "High Priests," and I say that that was the beginning of the Society's new lease of life. What I want to point out is that they have finally shaken off the "Old man of the sea" of ultra-professionalism, and are tackling the work, still hindered very largely by the facts (1) that men who grumble in secret take no part in affairs, nor write their views, nor make workable suggestions; (2) that the Council still want saving from a few of their friends who fail to recognise the inevitable. However, the Council are, I think, helped by the fact that the insufferable prigs who used to write such egregious letters have been "squashed," let us hope, for ever. The suggested curriculum, I say, is wrong on several points, viz.:

1. The lectures are compulsory and bar out the men who study at home. They are not 2½ per cent., so why not make a loophole and give a percentage to men who have attended lectures, because we all believe that the effect of a pharmacy class is good? Give the syllabus and recommend standard works of reference for home study, and let them study at home if they like. We may take it that there won't be any trouble over the Final examination. Over 90 per cent. take a college course as it is, without any compulsion.

2. The Intermediate examination. Compulsory lectures also wrong. Science and art classes are of very little use to pharmacy students, but it is evidence of a desire to learn, so why not give a percentage to those who can prove attendance at lectures? Give a syllabus of work and recommend standard works of reference, to be approved by the Council, for home study.

3. The curriculum is right in not demanding that the Preliminary be obligatory before starting on the apprenticeship. It is much better when it is so taken, I agree, but it is impossible to make it obligatory.

My last two apprentices were men who had failed to get through the examination for school teachers. Both came to me when well over eighteen years of age; neither had studied Latin; both took eighteen months to pass, and neither of them was of much use to me until he had passed; but had I insisted on it being passed first I should have lost both men, and (as it happened) they were the only applicants each time. Therefore, we may say the Preliminary is right. The Final is right when the little loophole is let in and there remains only the Intermediate. How will it affect apprentices? Scarcely at all. If they are in big towns or cities they will have every chance of lectures, which they need not take during apprenticeship unless they are pushed on. If they are in small towns or villages, they will have the syllabus and the books of reference as recommended, which they need not read during apprenticeship unless they are pushed on. The net result is that they can (and most likely will) take a session at a pharmacy college for the Intermediate and another for the Final, and instead of cramming for six months (as is now

done) they will be able to study (or cram a lot less) for the first two or three months, and then go back to work and college again for two or three months for the Final. That in itself will be a great advantage, and ought to decrease the failures to pass. It should give men more time to assimilate the subjects, and be less expensive, because short courses at classes are cheaper for fees and for lodgings than a six months' period right away, which latter cannot be done much under 40% to 50%.

Two periods at college are compulsory under the present scheme. Under mine they would be optional, but over 90 per cent. of men would take that course. Then why worry? Simply because the apprentice, in spite of the curriculum, can still continue to waste the whole of his time and then go to class and cram, and the supply of inefficient men will be little less than it is now. They will get through the examination easier; but as no one has ever suggested that our excellent pharmacy teachers are not doing well for us now, how can it be suggested that under the curriculum they will be able to do much better with the very raw material they will continue to get? The only way is by a sensible syllabus of work to be done during apprenticeship; by recommending a list of books of reference (examine the apprentice's note-book, says Mr. R. A. Robinson, as in Germany); by local Association examinations, as at Blackpool; and by the Secretary writing them periodically. Time off for study is absolutely impossible if the apprentice is a responsible youth and fit to be trusted with any work at all. If he is to learn the trade, then he must be there while the trade is being done, and that is just when lectures (as a rule) are also being given. It is the merest nonsense to expect employers to arrange that the trade should come to suit the apprentice. If he has time off and misses in three years much experience, then you have again more inefficient assistants examined to death.

The chance is before the trade of obtaining a sensible, practical, workable curriculum, which will help us to tackle our difficulties instead of adding to them; will give us apprentices who really know things and who are pushed on as they ought to be now that the customary five years seems to have been replaced by three years' apprenticeship. Our trade is one of the best of the shopkeeping trades; there is still much of the old craft in it, and there is still plenty of profit, but the work is too hard for want of efficient helpers.

JAY MACK.

Which is the Best Way to Get Experience?

SIR,—Christmas morning, and waiting for my Christmas dinner, which I hope will be something cool (the weather is very hot), with perhaps a dish of strawberries or raspberries and cream to follow. I have just been reading "Xrayser II." on "Applying for Situations and the Ethics of Testimonial Giving." No doubt there is much to be said on his side as to length of previous engagements being the best criterion of character, but I think I see in this a typical British view—the conservative, stay-at-home idea. With us in the Dominion we are of a more roving disposition, and my advice to young men just out of their apprenticeship is to travel to different parts of the Dominion, staying a year or two in each place and so gain a good all-round experience, so valuable to one when he gets a shop of his own; pick his situations, only choosing those of best repute; never mind the salary, gain experience—that should be his main object for the first four or five years after leaving his apprenticeship. My personal experience was: Apprenticed in Invercargill (a large town), then to a port for four months; then to Napier (another fairly large town in the North Island), and after eighteen months there I left a good well-paid situation to accept a much smaller salary at the leading dispensing establishment in one of the large cities; eighteen months here of dispensing work only, and then to a small country town for a few months, where I secured the dispensership at one of the largest hospitals in the Dominion. After being nearly eighteen months there, a business offering, I bought it and settled down. The experience thus gained has been invaluable, and I would advise young men to do the same. Here we have the other side of the long-engagement argument, short engagements with varied experience to my mind being the most useful, at any rate to the assistant

himself. It is time to close the shop and go home to the dinner that was in my mind's eye when I started this, so wishing you and my brother pharmacists in England a very prosperous New Year,

I am, etc.,

A NEW ZEALAND CHEMIST. (191/36.)

P.S.—I may add for "Xrayser's" comfort that I settled down here just twenty years ago and have not shifted since, so perhaps there is something of the stay-at-home about me after all.

Subscribers' Symposium.

For questions, answers, incidents, and interchange of opinions among "C. & D." readers.

Why do Pint Measures Crack?

On three separate occasions we have found a 20-oz. glass measure cracked after dissolving therein soft soap, B.P., 3iv., in methylated spirit 3ij. We are certain that the cracks were not the result of careless handling.—C. & Co. (199/7.)

Oxymel Scilla.

A 4-lb. parcel of oxymel scilla recently received has solidified. Can you tell me why? The representative of the manufacturer says it is due to a peculiarity in the honey. I hold that it is faulty manipulation. Which is right?—F. H. R. (189/5.)

The Hesperate.

I think the subjoined would be hard to beat.—R. W. Brownlow.

"DEAR SIR,—Will you kindly send me on a Suspender has soon has possible the Same has usual.

I Remain, yours Truly,

Mr. Brownlow.

The Ardent Cape-Coaster.

Messrs. Francis Newbery & Sons, Ltd., found in their last Colonial mail-bag the following request—unusual even for the great sample-land:

Cape Coast: January 20, 1911.

DEAR SIR,—I shall be very thankful to you if you will recommend me a medicine which will assist me in *Learning*. Please send me a sample. Hoping to hear favourably from you.

I am, yours truly,

[Name and address.]

Counter Prescribing.

I have had an experience to-day which shows another side of this question—viz., the matter of £ s. d. Enter an Italian street-musician with child. "Please, Mr. Chemist, can you give me some stuff for this bairn's spots?" I examined the child's arms and face and found them covered with a rash. Told her to take the child to a doctor, as it might turn out to be measles. I.S.M.: "Please, Mr. Chemist, I have just been to Dr. So-and-So, and he told me to take it along to the chemist and get some ointment." Sale, 1 oz. ung. sulph., 2d.—B. P. (197/52.)

Ha'porths in Belfast.

Through your valuable C. & D. allow me to ask a few questions in reference to the prices of drugs in our city of Belfast. We have a trade association in this city for a uniform price in patents; it is fairly well adhered to by the trade, but still a greater evil than the "cutting" of patents confronts the trade—viz., customers being in most cases supplied with a halfpennyworth of a tincture or powder. Is it a fact that a customer can go into a chemist's or drug-store and get a halfpennyworth of oxalic acid or laudanum? I have been informed so. If competition is bringing the trade to this, I suggest that the Ulster Drug-trade Association should "step in" and make a uniform price for tinctures and powders. Can any of my brother chemists find a way out of the difficulty?—"1d. Worth Only." (201/11.)

What is "Genuine Baking-powder"?

I notice in your issue of February 11 that you report the Hertfordshire analyst had stated that samples of baking-powder, among other things, were genuine. Would you kindly tell me whether my recipe is considered to make a genuine baking-powder?

P. ammon. carb.	...	...	2½ oz.
P. tart. acid. (dried)	...	...	5½ oz.
Sodium bicarb.	...	...	8 oz.
Ground rice	...	...	16 oz.

I remember a few years ago some controversy over this question, and, I think, ground rice figured somewhat in the correspondence. Do you think mine a good formula? My customers speak highly of it.—Jumbo. (201/4.) [There is no

legal standard for baking-powder, but public analysts are accustomed to report those which contain alum as being not genuine. Our correspondent's formula contains nothing but approved constituents, and it provides an excellent powder for making light bread and pastry.—EDITOR C. & D.]

A Winter Butterfly.

In greenhouses it is a common occurrence for butterflies to emerge from their cocoons in winter time or much earlier than their normal time of pupation. Entomologists sometimes force the emergence of butterflies by placing a box containing the pupae on a shelf in a room where there is a fire all day. This saves time in the busy seasons, when collectors' setting boards are kept fully occupied.—W. E. Gaze, *Higams Park, Essex*.

Mr. Valpy's capture is no phenomenon. In the first place, if it emerged from a cocoon it is a moth. Various moths appear in the winter months only. Two are the December moth and the winter moth, many more hibernate and fly about on abnormally warm days. Our commonest butterflies and most gorgeous (Tortoiseshell and Red Admiral) hibernate in dark corners in rooms and sheds. Queen wasps and bees do also. I had a Tortoiseshell brought to me on January 27 from a bedroom in which a fire had been lighted. It is hibernating in a cool room again, and it will, if undisturbed, remain there till late in April. Butterfly chrysalides are rare and attached to walls, leaves, trees, etc., without a cocoon.—Clifford Moore, *Pharmacist, Mem. N. Staffs. Field Club*.

There is nothing really remarkable, under the circumstances, in the emergence of the insect at so early a date; the forcing of pupae by artificial heat—usually moist heat—is commonly practised in order to obtain specimens for any special purpose during the winter time, when entomological work generally is very quiet. An interesting case of unintentional forcing was shown by a brood of Oak Egggar caterpillars. A pregnant female of this handsome, though common, insect was taken, and shortly deposited her eggs. (By the way, these could not be said to be "laid"; they were expelled forcibly like bullets from a gun.) The ova hatched out well, and the resulting caterpillars were fed through the autumn as long as a green leaf could be found. Then they made their cocoons and pupated, after which, instead of remaining *in statu quo* until about the following May, they remained a few weeks only, appearing, every one of them, as the perfect moths several months before their time. The pupae had been stored in a warm room, and had responded to the mild "forcing." Your correspondent states that the larva formed its chrysalis, and "later the cocoon was formed to protect it." This, however, is putting the cart before the horse. No chrysalis is capable of forming anything—the caterpillar makes the cocoon before assuming the chrysalis state within it. Might I just point out also that none of our butterflies make cocoons? If there was a cocoon, then the insect was undoubtedly a moth. But perhaps I may have the pleasure of seeing it?—E. Purnell Jones, *F.E.S. (Day & Sons Crewe Ltd.)*. [We have forwarded the specimen to Mr. Jones.—ED.]

Dispensing Notes.

This section is for the discussion and solution of dispensing problems and prescriptions received by "C. & D." readers. We are always pleased to receive the opinions of readers for publication. "The Art of Dispensing" ("C. & D." Office, 6s.) is the standard book of reference on this subject.

Chloral Suppositories.

Acid (24/19) asks how to make in the cold 5-grain chloral-hydrate suppositories. [In winter such suppositories can be made perfectly decent in the cold. We have just turned out some with the thermometer at 48° F. Simply triturate the chloral hydrate and the cacao-butter together, and pack firmly into a mould which has been dusted with lycopodium or starch-powder. The mixture at first is soft, but it sets afterwards. At temperatures over 50° F. it is well to add some white wax to give increased firmness, and the best way to proceed is to melt it with the cacao-butter, allow to become cold, and then shave off sufficient to serve one's purpose for trituration with the chloral. Half a grain of wax to each suppository is usually sufficient.]

White Pills.

Acid (24/19) wants to know how to make the following into white pills:

Menthol.	...	...	...	gr. j.
Ac. carbol. crystals	...	...	...	gr. j.
Ft. pil. j.	Mitte	vj.		

[Very nice white pills can be made by the following method: Place the menthol and carbolic acid with 12 grains of white beeswax in a squat cylindrical pill-tube, or any other such convenient container, with a good-fitting cork, heat on a water-

bath till the wax be melted and the mixture becomes a clear liquid. Then stand in cold water till it solidifies. Transfer to a mortar, add 4 grains of any white inert powder—starch or flour, for example—work gently into a mass, and roll out in plenty of white powder. This is a case in which wax is eminently suitable, apart from its convenience in forming the pills. Pills containing such constituents as menthol and phenol agree best with the patient when they do not liberate the active constituents too rapidly. Those made by the method described, while of a consistence to raise no suggestion of insolubility, do not disintegrate so quickly as to make it probable that any discomfort will be produced.]

Legal Queries.

Consult the Legal Advice Section of "The Chemists' and Druggists Diary," 1911, p. 435, before writing about your difficulty.

Scotch Subscriber (195/31) puts the following case: A sells a business to B, and B pays goodwill; in consideration of goodwill, A signs an agreement that he will not carry on business in any shape or form within a radius of twenty miles for a period of ten years. Can A, having a business outside the radius of the twenty miles, advertise, circularise, and sell goods per post in the restricted area? [Before giving a definite reply we should want to see the agreement entered into between the parties; but from what subscriber tells us of its contents we are of opinion that it would not be enforced against the covenantor as being too wide for the reasonable protection of the covenantee. If the restriction had been against carrying on a competitive business, we think A could be restrained from breaking his agreement. Further that that advertising, circularising, and selling goods per post within the restricted area would be held to be a breach of the agreement. Subscriber used as a *nom-de-plume* the name of a Scotch town in which he is not in business. As this might lead to the supposition that A and B are in business there, we have given him another.]

Chemist (200/43).—You will see by reference to the *C. & D. Diary*, 1911, p. 437, under "Branches," that there is an element of doubt as to whether a duly registered chemist and druggist may carry on business as such in one place, and as a drug-store, without poisons or title, in another. Section III. (1) of the 1908 Act applies only to individuals, and not to companies, but Section III. (4) lays down the conditions under which such companies may carry on the business of a chemist and druggist; (a) relieves that part of the business which has not to do with the keeping, retailing, and dispensing of poisons from the control of a registered chemist; and (b) requires a qualified manager "in every premises where such business as aforesaid is carried on." From this it may be deduced that if the business is not "as aforesaid"—i.e., if the business in the branch does not relate to the keeping, retailing, and dispensing of poisons—a registered chemist is not required to manage the branch. As to the use of the title, the concluding part of the section is specific—namely, that a company may use the description of "chemist and druggist" if the requirements of Section III. (4, a and b) are observed. Since these requirements are the appointment of a registered chemist as the superintendent of the company and the management of every premises by a registered chemist, it appears that a limited company carrying on the business of a chemist and druggist and using the title on any of its premises must have a registered chemist in each of the branches of its business. The point is open to argument, but until the contrary is proved in the courts, we do not consider that it is within the powers of a limited company to own and carry on simultaneously chemists' shops with poisons and drug-stores without them, and use the title "chemist and druggist" otherwise than as is laid down in the Act.

Miscellaneous Inquiries.

We do not as a rule repeat information given in this section during the past twelve months. When references are given to past issues, these should be consulted. Back numbers for the past five years can generally be obtained from our office at the published prices. We do not undertake to analyse and report upon proprietary articles.

J. R. W. (184/41).—It is not possible to identify the variety of primrose from the single leaf you send, but several species of *Primula* cause skin-eruptions, notably *Primula obconica* an ornamental variety which occasions considerable suffering among some gardeners by its powerful action on the skin. The irritation is due to the secretion in the glandular hairs on the plant.

W. S. S. (169/13).—CASTRATING-STICKS FOR LAMBS.—We think these must refer to sticks of diachylon plaster, which is applied in a melted condition to the parts after operating.

A. W. P. (166/1).—We do not recognise the powder, the source of which you do not tell us.

D. B. (182/37).—If you tell us the name of the gout and rheumatism specific we may be able to trace the present address of the makers.

B. H. (193/59).—The publisher of Mr. F. B. Leeming's book on the income-tax is Mr. Effingham Wilson, 54 Threadneedle Street, London, E.C. An excellent book on uric-acid diseases is Dr. Alexander Haig's "Uric Acid as a Factor in the Causation of Disease" (Churchill, 14s. net).

S. B. (180/69) asks: "Is it possible to combine iron with tincture of orange, at the same time avoiding the change in colour? What is the chemical explanation of this change?" [The number of iron salts from which you can choose is limited. The darkening occurs most markedly with ferrous salts, and in a less degree with ferrous salts containing inorganic acids, so that, pharmacopoeially speaking, you have only two iron salts left—viz., iron and quinine citrate and iron and ammonium citrate. The latter has so much colour itself that a little more would not matter. Iron and quinine citrate has very little darkening effect on tincture of orange. The B.P. tincture, moreover, gives an opalescent mixture with water. If you want to get a clear preparation, you must use a tincture made with a diluted alcohol. Should you want an orange-flavoured mixture containing iron only, we would suggest the use of the green iron and ammonium citrate. It would be well to employ a reducing-agent in the mixture, such as glucose or glycerin. The chemical nature of the change in colour has not been definitely explained. One of the principles of the peel gives the reaction with ferric salts which produces the black colour.] A second question is: "Can any chemical action take place in a B.P. glycerin suppository which is wrapped in lead foil as a preservative?" [These suppositories contain gelatin; gelatin contains sulphur; sulphur compounds even in minute quantity in contact with lead form lead sulphide, which is black. You may, therefore, have a superficial blackening of the lead foil in contact with the suppository. B.P. glycerin suppositories do not require any wrapping to preserve them. If you must wrap them, use a thin paraffin paper.]

F. J. H. (185/68).—(1) TOMATO SAUCE.—The following illustrates the method of making thick sauces and also the means of giving additional body to the liquid:

Tomato pulp 1 gal.

Heat to boiling-point and pour on to the following spices previously bruised or reduced to powder:

Shallots 3 oz.
Cayenne ½ oz.
Lemon-peel, mace, ginger, and
cardamoms, of each 2 dr.
Caraway, coriander, cinnamon,
cochineal, and celery-seed, of
each 1 dr.

When cold pass through a nickel or hair sieve, and add:

Acetic acid, B.P. 10 oz.
Powdered tragacanth 200 gr.
Rectified spirit ½ oz.

The tragacanth is mixed with the spirit before adding it to the acetic acid. The sauce should be allowed to stand for at least a month before use.

(2) OVARY TONIC FOR POULTRY.—This generally consists of syrup of ferrous chloride, for which the following is the recipe:

Iron wire 300 gr.
Hydrochloric acid 2 oz.
Citric acid 10 gr.
Distilled water 10 dr.
Syrup, to make one pint.

Mix the hydrochloric acid with 1 oz. of water in a flask, add the iron wire, and heat gently till action ceases. Remove from the source of heat, add the citric acid, and filter through paper into 10 oz. of syrup. Wash the filter-paper with the rest of the water and add syrup to make up the measure.

F. and C. (Constantinople) (193/26).—BOOKS ON SOAP-MAKING.—Hurst's "Soaps: A Practical Manual of the Manufacture of Domestic, Toilet, and Other Soaps" (Scott, Greenwood, 12s. 6d.); Watt's "Art of Soap-making: Practical Handbook of Manufacture of Hard and Soft Soaps and Toilet Soaps" (Lockwood, 7s. 6d.).

R. M. L. (184/53).—(1) STOPPING-OUT NEGATIVES.—This is managed by using Chinese white or Venetian red paint, such as is sold in tubes for artists' use. (2) ADVERTISEMENT-WRITING is taught at the Dixon Institute, 193-195 Oxford Street, London, W., and at the Page-Davis Advertising School, 9-15 Oxford Street, London, W. You should write to these firms for their prospectuses.

Rad. Gent (185/15).—PANSY TEA as used on the Continent. This is prepared by infusing 1 part of dried flowers of *Viola odorata* in 100 parts of boiling water for half-an-hour and straining. An infusion of the whole plant is also employed.

W. J. J. (185/22).—OPTICAL INSTRUCTION.—The names of the best optical instructors are given in the *C. & D. Educational Number* (August 13, 1910). The papers set at the examinations of the Spectacle-makers' Company are published by "The Optician" (123-125 Fleet Street, London, E.C.).

W. E. B. (42/23).—BOOKS FOR MARRIED PEOPLE.—There is a little book, "Advice to the Married" (Moore, Williams & Co., Belfast, 1s.), which will probably be useful to your customer; but for your own information such works as Quain's "Dictionary of Medicine" (Longmans, 21s.) or Cassell's "Family Physician" would be better.

A. S. (191/6).—(1) The advertisements in THE CHEMIST AND DRUGGIST give many examples of suitable designs for window-ticket borders. There are no books which give these unless they are the catalogues of type-founders, and these are not readily available. (2) NICKEL-PLATING STEEL.—Add to a 10-per-cent. solution of pure zinc chloride enough nickel-sulphate solution to impart a distinct green colour and boil in a porcelain vessel. Free the articles to be coated from grease, suspend them in the fluid, and boil for from $\frac{1}{2}$ to 1 hour. Then wash the articles in chalk and water, rinse dry, and finally polish with chalk.

W. S. & Co. (186/49).—DYEING COTTON.—The best fast dark navy-blue is probably that obtained with the indigo-bath. The material is immersed in the bath and then exposed to the air; the indigo-white absorbed by the fibre is oxidised and reconverted into indigo-blue, which being precipitated within and upon the fibre is permanently fixed. There are various baths employed for dyeing cotton, such as the ferrous sulphate, the zinc-powder, or the hyposulphite vats. The first-named is composed of the following ingredients:

Finely ground indigo	...	...	40 kilos.
Ferrous sulphate	...	...	60 to 80 kilos.
Dry slaked lime	...	...	50 to 100 kilos.
Water	...	...	4,000 litres.

The lime decomposes the ferrous sulphate with the production of ferrous hydrate, and this in the presence of lime and indigo decomposes the water, yielding ferric hydrate and hydrogen; the last-named combines with the indigotin and produces indigo-white, which dissolves by reason of the excess of lime present.

J. W. M. (186/59).—BARBADOS TAR is crude petroleum exported from Barbados. It formerly occupied a position of much importance in the *materia medica* of this and other countries. Barbados tar was official in the Dublin and Edinburgh Pharmacopœias as *oleum petrae*, and was given in doses of ten to fifteen drops on sugar as a stimulant, antispasmodic, diuretic, and antelmintic.

E. D. (Vevey) (188/65) and *G. L.* (196/64).—We are not acquainted with the "dry" shampoo-powder you mention.

C. H. B. (Calcutta) (148/66).—SPIRIT-DUTY TABLES.—There is a table in the *Diary* of the "Wine and Spirit Trade Record" (59 Mark Lane, London, E.C.) which gives the duty payable on spirit of various strengths. This, we think, will fulfil your requirements.

Pig-skin (193/58).—INK-STAINS.—Oxalic acid will remove the ink-stains from the leather pocket-book, and with care a fairly good result will be obtained.

J. M. B. (192/70).—You are the best judge as to which skin-cream formula is nearest your ideal.

V. T. (Winnipeg) (187/32).—IRISH SLATE, a natural product, is an argillaceous slate which is supposed to owe its curative properties to the iron and sulphur it contains. It is used internally and externally for bruises. The dose is 5j. to 5ij. of the powder stirred in any convenient liquid.

P. L. (196/2).—LECITHIN is choline di-stearo-glycerophosphate, but there seems no objection to increasing the proportion of glycerophosphates by admixture.

Colon (201/9).—Provided there is no disease of the bowel warm-water injections for the relief of constipation are not injurious. We have known individuals who have used these for forty years with benefit.

Nemo (200/2).—The new edition of the British Pharmacopœia is now in preparation, and it is probable that the Committee of Reference in Pharmacy will complete its labours in a few months, but it may be the end of 1912 before the new Pharmacopœia is ready for publication. Students should, in the meantime, study the 1898 edition. Mr. H. Wippell Gadd's "Pocket Synopsis of the British Pharmacopœia," published by Baillière, is the kind of book you require.

Alpha (193/61).—MANGE-APPLICATIONS FOR CATTLE AND DOGS. There are very many combinations of drugs employed in the cure of mange in animals, and each dog-fancier or cattle-man has his own never-failing recipe. The old-fashioned sulphur, tar, and train-oil mixture to which you refer can probably hold its own against most of the recently introduced specifics. We give a few formulæ, from which you can make your selection:

- | | |
|------------------------------|----------------------------|
| 1. Acid. carbol. ... 3iiss. | 4. Zinci oxidi ... 3ij. |
| Aquam ad ... 3xij. | Acid. carbol. ... m20. |
| Apply daily. | Vaselinum ad ... 3j. |
| | Apply daily to dog's coat. |
| 2. Sulphur nigr. ... 3ijj. | 5 Ung. hydrarg., |
| Potass. carb. ... 3j. | Potass. bicarb. aa. 3ij. |
| Ol. picis ... 3ss. | Acid. carbol. ... 3j. |
| Ol. cetacei, | Sulphur nigr. ... 3j |
| Aquæ ... aa. 3iiss. | Acid. hydrocyan. |
| Signe: Wash the part | dil. ... m20. |
| thoroughly with soap and | Ol. cetacei ... 3j. |
| water, apply the lotion, | Ol. lini ... 3ijj. |
| allow to remain on for three | Apply as No. 2. |
| days; then wash off and | 6. Potass. sulphidi 3ij. |
| repeat if needed. | Aq. ferv. ... 0j. |
| | Apply daily. |
| 3. Creosoti, | 7. Ol. picis ... 3j. |
| Glycerini ... aa. 5j. | Ol. cetacei ... 0j. |
| Aquam ad ... 0j. | Apply daily. |
| Apply daily. | |

F. W. L. (192/72).—DENTAL ANÆSTHETIC.—Your formula is too complicated, but we think the swelling of the gums and cheeks that occurs after a few hours is due chiefly to the introduction into the tissues of the various antiseptics, especially the fairly large proportion of phenol. You should employ one of the simpler recipes which you will find in the last volume of THE CHEMIST AND DRUGGIST.

F. A. J. (Trinidad) (184/44).—PULVIS ANTIMONII COMPOSITUS employed in the preparation of infants' teething-powders is pulvis antimonialis, B.P.—antimonious oxide 1 part, calcium phosphate 2 parts.

B. and P. (Geneva) (198/59).—LAC MAGNESIÆ.—The Edinburgh formula is probably the best for this:

Magnes. sulph.	...	...	5xix.
Liq. potassæ	...	...	q.s.
Aquæ	...	...	q.s.

Dissolve the magnes. sulph. in 2 pints of water, precipitate with liq. potassæ, well diluted, wash the hydrate thoroughly with cold water by decantation, and diffuse in a sufficiency of water to make 20 oz. The addition of 5 per cent. of calcined magnesia is an advantage as regards the much-liked milky appearance.

The subject is dealt with in considerable detail in "Pharmaceutical Formulas."

W. H. F. (199/8).—We cannot undertake to provide a formula to imitate the proprietary wine you indicate.

Retrospect of Fifty Years Ago.

Reprinted from "The Chemist and Druggist," February 15, 1861.

In the Drug Market

business has been to a fair extent at pretty steady prices. Jalap is 2d. and 3d. dearer; sales made at 4s. 8d. and 4s. 10d. Turkey opium steady, at 17s. 6d. to 18s. 6d. for good and fine. A good quantity of castor oil has been disposed of at previous prices; good and fine pale seconds 5½d. to 6½d. Oil of aniseed is 3d. and 4d. lower; sales made at 7s. Oil of cassia is also 9d. cheaper; several cases sold at 10s. Java cubobs have declined to 7l. to 7l. 5s. Crown and grey, as well as flat and quill, barks brought steady prices. Several parcels of balsam of capivi sold at 1s. 11d. and 2s. 1d. Some cod-liver oil realised 4s. for middling, up to 6s. for good. A large parcel of Tinnevely senna sold at firm prices; middling to fine bright 4½d. to 10d., and inferior 2½d. to 3½d. Shellac has fallen 30s. to 60s. Gums Arabic and Benjamin are without change. Some Singapore Dammar sold at lower prices. Rhubarb was bought in at firm rates. Beeswax was steady. Good and fine aloes have realised former rates. Nux vomica is 1s. to 1s. 6d. lower, good quality selling at 9s. 6d. and 10s. 6d. Refined camphor was bought in at 1s. 10½d. Ipecacuanha is held for former rates. Cardamoms steady; Malabar 4s. 6d. to 4s. 8d., and Madras 3s. 9d. to 4s. 4d. Honey was chiefly bought in. A few lots of otto of roses, pure, sold at 23s. Scammony, part sold at 20s. and 28s. A large parcel of Tonquin musk sold at good prices, from 29s. to 35s. China galls sold at 32s. 6d. and 33s. 6d. Sarsaparilla without change. Linseed oil is rather better; sales made at 28s. 3d. and 28s. 6d. Rape oil is rather firmer; refined foreign 40s. and 41s., and very fine French 42s. 6d. and 44s. per cwt.

OPTICAL AND PHOTOGRAPHIC.

PLATE Voigtlander Heliar reflex camera, focal plane shutter with speeds up to 1/1000 second and time exposures; fitted Heliar anastigmat F 4.5, Voigtlander Telephoto lens, 3 slides and case; list price over £26; a bargain at £13 5s. BISHOP, 466 Holloway Road, London, N.

PROPRIETARY ARTICLES.

TALLOIDS, 17 ls. 1½d., 2 2s. 9d., quite clean; what offers? GRIFFITH, Chemist, Shepton Mallet.
 RESH 15 Virol 2s. 11d., 6 ls. 8d., 9 ls.; best cash offer. 201/46, Office of this Paper.

SHARES.

SHARES for sale. See p. xxvi.

SHOP FITTINGS.

HOGANY adjustable wall-case, nearly new, glass top and bottom, 8 by 6 ft.; half price, £8; mirror-case Desk, £2. HAGUE, 24 Old Street, Ashton-under-Lyne.

MISCELLANEOUS.

FREE gross 6-oz. parcel-post boxes, lined corrugated paper; what offers, whole or part? sample sent. SAGE, Lostwithiel, Cornwall.
 OR sale, two steam-jacketed copper pans; capacities 21 gals. and 9 gals.; little used; can be seen any day in London by appointment. Address replies, 202/26, Office of this Paper.

EW "Eureka" tablet-machine, complete, cost £6, accept nearest offer; analytical balance in case, by Robinson, gilded pans hung on platinum wires, extremely sensitive, £4; bargain. WHITAKER, Redruth.

OZ. pulv. ipecac.; 11 oz. pulv. gamboge; 1 lb. pulv. euphorbia; 5 oz. ferri citras (scales); 10 oz. vermilion; 18 gross pil. opii, simple ½-grain, uncoated; 14 vigoroids; 24 beryl 4½d., 10 beryl 7½d.; all good condition; offers wanted, whole or part. BOARDMAN, Chemist, Abergele, North Wales.

WANTED.

T. bent-glass counter; good condition. LEGGOTT, Chemist, Hull.
 D artificial teeth bought; cash return post. BROOKE, 6 New Road, Spalding.

LL-CUTTING rollers. State size and price for spot cash, 181/16, Office of this Paper.

MPLETE set books for Preliminary. Particulars and lowest prices, KIDD, Newgate, Bd. Castle.

BE refractometer, second-hand, complete, in perfect order. D. & J. FOWLER, LTD., 2 Lime Street Square, E.C.

EAP for cash, job line of tooth-brushes, tooth-soaps, and dentifrices. SECRETARY, Zander House, Chesterfield.

NTAL chair and all apparatus; where can be seen near Liverpool. Address, "DENTAL," 248 Stanley Road, Liverpool.

AIN'S "Dictionary," Whitt's "Materia Medica," P.J. Formulary. State edition and lowest price, ANTHONY, Pharmacist, Abercynon.

TICAL trial case, large size, complete; also optical sundries; must be cheap. BROADHEAD, Frank Street, Barnoldswick.

HEMIST AND DRUGGIST" for 1911 (commencing now); posted Saturdays; quote lowest price. PEARSON, Dispensary, Burton-on-Trent.

TICAL books; Minor, Major, Chemists' books; send prepaid for valuation; cash offers per return. GOWER, Bookseller, Waterloo, Liverpool.

TIQUES, pharmaceutical apparatus, e.g. Chemist's jars, mortars, scales, weights, measures, prints. "X. Y. Z." (202/28), Office of this Paper.

PSULING machine (second-hand) for capsuling ½, 1, and 2 pint bottles. Full particulars to W. CANNING & Co., Kenyon Street, Birmingham.

ALYTICAL balance Perkins' "Analysis," and "Organic Chemistry," Newth's "Inorganic." GREENISH, M.P.S., 14 Fawdry Street, Wolverhampton.

ADDRESSES WANTED.

DRESS wanted, H. Q. Wade, late of Cash Drug Stores, 47 Poulton Road, Seacombe, and previously of Boaler Street, Liverpool. 200/18, Office of this Paper.

NTED, the address of William Ernest Gay, relieving chemist. 182/24, Office of this Paper.

NES and addresses of retailers of "Oppo" and "Nedab" requisites. 182/10, Office of this Paper.

GAZETTE.**Partnerships Dissolved.**

BAXTER, P. C., and HARRIS, P. T., King's Road, Chelsea, London, S.W., chemists, etc., under the style of Baxter & Harris.

CAPPER, S. J. and H., and THOMPSON, E., Manchester, Liverpool, Birkenhead, Southport, Sheffield, Huddersfield, Bradford, and Leeds, chemists, under the style of Thompson & Capper; so far as regards H. Capper.

HOUGHIN, E. K., and ELLIOTT, G., Ilford, physicians, etc., under the style of Houghin & Elliott.

JOB, C. F., and HUTCHINSON, S. W., Wakefield, wholesale druggists, under the style of Job & Carr.

The Bankruptcy Acts, 1883 and 1890.**RECEIVING ORDER.**

LOWTHER, HORACE, Dulwich Road, Herne Hill, London, S.E., late Ventnor, surgeon.

ORDER MADE ON APPLICATION FOR DISCHARGE.

HILLS, THOMAS HERBERT, Creek Street, Deptford, London, S.E., manufacturing chemist: order made on June 18, 1909, rescinded, and ordered that debtor's discharge be suspended for two years, ending January 6, 1913.

BUSINESS CHANGES.

Notes for this section sent to the Editor should be authenticated, and must not be in the nature of advertisements.

MR. W. S. PROCTOR has opened a pharmacy at 146 Princess Road, Moss Side, Manchester.

MR. W. E. TRATTLES, chemist, has purchased the business of Messrs. Swire & Co., at Streatham Hill, London, S.W.

MR. J. PATTERSON, chemist and druggist, has acquired the business of the Ilford Drug-stores at 52 Ilford Lane, Ilford.

MR. P. COWDY has opened a drug-store and sight-testing rooms at 153 High Street, Aston New Town, Birmingham.

MR. W. LUTY WELLS, chemist, Yiewsley, West Drayton, has opened a branch pharmacy opposite the West Drayton railway station.

THE proprietors of Messrs. Mellin & Co., Eltham, have purchased the business of Mr. W. Rooke-Roberts, chemist and druggist, at Mottingham, Kent.

MR. J. R. CAVE, chemist and druggist, 52 Nevill Street, Southport, has purchased the business and stock of Mr. H. Ball, Ph.C., of 251 Lord Street, Southport.

MESSRS. GODDEN, chemists, of East Dulwich and Hither Green, have purchased the business of Mr. A. Rayner (late Robinson) at 298 Streatham High Road, London, S.W.

MR. H. F. BUNTING (late Wrench, chemist), 92 Kirkdale, Sydenham, has closed the business, the prescriptions, books, etc., being taken over by Mr. A. B. Makepeace, chemist, Kirkdale, Sydenham.

PROFESSOR V. H. BLACKMAN, M.A., Sc.D., of the University of Leeds, has been appointed to the Professorship of Plant Physiology and Pathology at the Imperial College of Science and Technology at South Kensington. Professor Friedrich Czapek, of Prague, did not see his way to accept the appointment.

THIS week's meeting of the Glasgow and West of Scotland Chemists' Association is to discuss the draft scheme for the division of the Minor examination, and the institution of a curriculum of study. The notice of the meeting suggests that special attention be directed to the following points:

1. Is the principle of a compulsory curriculum accepted?
2. Is the present moment opportune for its institution?
3. Should certificates from other examining bodies be accepted for the Intermediate examination (i.e., Botany and chemistry)?

It is hoped that Mr. W. L. Currie, Vice-President of the Pharmaceutical Society, will be present, and that he will make a statement concerning the Society's policy.

TRADE-MARKS.

Objections to the registration of any of the undermentioned applications must be stated on Form T.M. No. 7 (obtainable at Money Order Offices for £1) and lodged with Mr. Temple Franks, Comptroller-General, Patents Office, 25 Southampton Buildings, Chancery Lane, London, W.C., within one month of the dates mentioned.

The figures in parentheses refer to the classes in which the marks are desired.

(From the "Trade Marks Journal," January 25, 1911.)

Design; for photographic goods (1). By O. Perutz, Dachauerstrasse 50, Munich. 327,020.

Label device including "F. F. BRAND (FARMER'S FRIEND)"; for chemicals (2). By Francis & Co., 50-52 Union Street, London, S.E. 327,961.

"ANGIER'S EMULSION" (By order); for a medicine (3). By Angier Chemical Co., Ltd., 86 Clerkenwell Road, London, E.C. 320,958.

"SAL HEPATICA," and two label designs; for a medicine (3). By Bristol-Myers Co., 277-279 Greene Avenue, Brooklyn, New York, U.S.A. 329,362.

"SEMPLE"; for medicated suppositories. By The British Drug Houses Ltd., 22-30 Graham Street, City Road, London, N. 329,438.

"SCUR"; for medicinal chemicals (3). By Société Chimique des Usines du Rhone, 6 Rue Pigalle, Paris. 329,439.

"LE BRAS SEUR," in triangle; for all goods (11). By Gertrude Desmond, Geoffrey Buildings, John Bright Street, Birmingham. 329,227.

POISONING FATALITIES.

EIGHT deaths, including three by misadventure, have been reported since our issue of last week:

Arsenic.—An official intimation states that it has been definitely ascertained that the poison which caused the deaths of Messrs. C. B. Hutchison and A. Clapperton at Dalkeith (C. & D., February 11, p. 211) was arsenic, distinct traces of this poison having been found in the coffee partaken of after supper. Arsenic was not present in the coffee purchased from Mr. Clapperton, nor was it found in the portion of ground coffee unused. No trace of the poison was found either in the milk or sugar served with the coffee.

Carbolic Acid.—A Pendleton labourer, named Derry, died in the Salford Hospital from carbolic-acid poisoning.—The suicidal death of Martha Elliott, domestic servant, at Blackwell was due to the same cause.

Laudanum.—At Southport, Harriet Emma Wall (35), house-keeper, died from an accidental overdose of laudanum.—This opiate also caused the suicidal death of Arthur Revill (43), miner, at Bobber's Mill, Nottingham. The drug had been contained in a lung-ionic bottle found near by deceased. During the inquest the Nottingham City analyst stated that the lung-ionic put up in bottles similar to that produced did not contain morphine.

Prussic Acid.—Dr. Alan Leslie Fielding (36), of Ottery St Mary, Devon, poisoned himself with this poison at Faulkner's Hotel, Charing Cross, London, W.C. He left a letter to the Coroner, in which he stated that he had taken an overdose of ac. hydrocyan. dil.

Potassium Cyanide was taken to ensure self-destruction by John H. Russell (51), clerk, Falmouth.

WILLS PROVEN.

MR. DAVID GLEN, Kilkerran Chemical-works, Maybole, Ayrshire, chemical manufacturer, who died on November 4, left personal estate in the United Kingdom valued at 4,360l.

MR. WILLIAM HENRY BELL, Bryn-y-Newadd, Llanfairfechan, Carnarvon, formerly of York, wholesale druggist, who died on December 29, left estate valued at 8,433l. 15s. 4d. gross, with net personality 8,145l. 13s. 4d.

MR. LOUIS SCHLESINGER, essential-oil merchant, Wilson Street, Finsbury, London, E.C., and of Lymington Road, West Hampstead, who died on January 4, aged eighty-three, left estate valued at 27,787l. gross and at 27,567l. net, and stated in his will that "it was his wish that on the demise of their mother none of his children should for a period of twelve months play cards or go to any place of amusement, or have any entertainment or evening parties either out of the house or in their own homes. He further enjoined his children to keep for ever the anniversary of their mother's and their father's death."

COMING EVENTS.

This section of the "C. & D." is reserved for advance notices of meetings or other events which are sent to the Editor by Wednesday of the week before the meetings, etc., occur.

Monday, February 20.

Society of Chemical Industry, London Section, Burlington House, Piccadilly, W., at 8 p.m. Mr. G. W. MacDonald on "The Composition of the Acids flowing from the Thompson Displacement Apparatus for the Manufacture of Guncotton"; Mr. Watson Smith on (1) "Ammonium Sulphate and its Instability," and (2) "The Hydrolysis of Ammonium Salts"; Mr. Emil Hatschek on "A Study of Some Reactions in Gels"; and Messrs. J. H. Coste and B. R. James on "A New Still-water Calorimeter."

Tuesday, February 21.

Bradford Chemists' Association, Royal Hotel, at 9 p.m. Mr. A. E. Benney on "The Hoar Apple Tree."

School of Pharmacy of the Pharmaceutical Society of Great Britain, Duke's Room, Holborn Restaurant, London, W.C., at 7.30 p.m. Annual Dinner. Tickets (6s. 6d. each) from Messrs. W. A. Storey and R. W. Wren, Hon. Secretaries, 17 Bloomsbury Square, W.C.

Wednesday, February 22.

Cardiff Pharmaceutical Association, Angel Hotel, at 3 p.m. Discussion on the Division of the Minor. At the Carlton Hotel, Queen Street, at 7.15 p.m., whist-drive. Tickets (2s. each) from Mr. W. R. Williams, Hon. Secretary, 60 Woodville Road, or any member of the committee.

Edinburgh Chemists', Assistants', and Apprentices' Association, 36 York Place, at 9.15 p.m. Arrangements by Mr. W. B. Cowie, Ph.C., F.C.S.

Institute of Ophthalmic Opticians, 20 Hanover Square, London, W., at 8 p.m. Dr. W. Ettles, M.D., M.S., F.R.C.S., on "The Physiology of Vision." Tickets can be had by sending a stamped addressed envelope to Mr. J. Harcombe Cuff, Hon. Secretary, 25 Friern Barnet Road, New Southgate, N.

Junior Pharmacy Ball, Portman Rooms, Baker Street, London, W., at 9 p.m. Tickets (7s. 6d. each, including supper and light refreshments) from Mr. J. E. Southon, 8 Leadenhall Street, London, E.C., or any member of the committee.

North Kent Pharmacists' Association, Mr. Gillett's Medical Hall Rooms, 152 Milton Road, Gravesend, at 4 p.m. Discussion on the scheme for dividing the Minor and establishing a curriculum.

Nottingham Pharmaceutical Association, George Hotel, at 8 p.m. Lecture by Mr. H. Gill on "Old Churches and Old Customs."

Plymouth, Devonport, and Stonehouse Association of Pharmacists. At 4 p.m., visit to the chemical-works of Messrs. Gibbs & Finch. At 8 p.m., lecture at the rooms of the Association by Mr. S. D. Venning, L.D.S., on "Dentistry."

Public Pharmacists' and Dispensers' Association, St. Bride Institute, Bride Lane, Ludgate Circus, London, E.C., at 8 p.m. Mr. C. Edward Sage, Ph.C., F.I.C., lantern lecture on "The Bacteriology of Pharmacy." Ladies are invited to attend.

Thursday, February 23.

Brighton Association of Pharmacy, "Old Ship" Assembly Rooms. Annual whist-drive and dance. Tickets (5s. each) from Mr. C. E. Robinson, Hon. Secretary, 4 Victoria Terrace, Hove.

Cheltenham Chemists' Association, Northgate Mansions, Gloucester, at 8.45 p.m. Discussion on the Curriculum Scheme opened by Mr. A. C. Saxby.

Chemists' Assistants' Association, 73 Newman Street, Oxford Street, London, W., at 9 p.m. Social evening.

Drug-stores Association of Great Britain, Nottingham Branch, Victoria Station Hotel, at 8 p.m. Annual dinner. Tickets (3s. 6d. each, lady's or gentleman's) may be obtained from the Hon. Secretary, Mr. Claude Manful, 58 Thurgarton Street, Smeinton.

Dundee Chemists' Assistants' and Apprentices' Association, Mather's Hotel, at 9.15 p.m. Mr. Kimber on "The History and Progress of Physical Education."

Hull Pharmacists' Association, Grosvenor Hotel, Carr Lane, at 8.30 p.m. Continental Smoker, the proceeds of which will be given to the Benevolent Fund of the Pharmaceutical Society. Tickets (1s. each) from Mr. Walter Staning, Hon. Secretary, 455 Anlaby Road.

Liverpool Chemists' Association, Royal Institution, Colquitt Street, at 8 p.m. Discussion on the draft scheme for dividing the Minor and establishing a curriculum.